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Vol. CLXXI No. 2229 WITH WHICH IS INCORPORATED THE GRAPHIC OCTOBER 10 1942

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THE SPHERE
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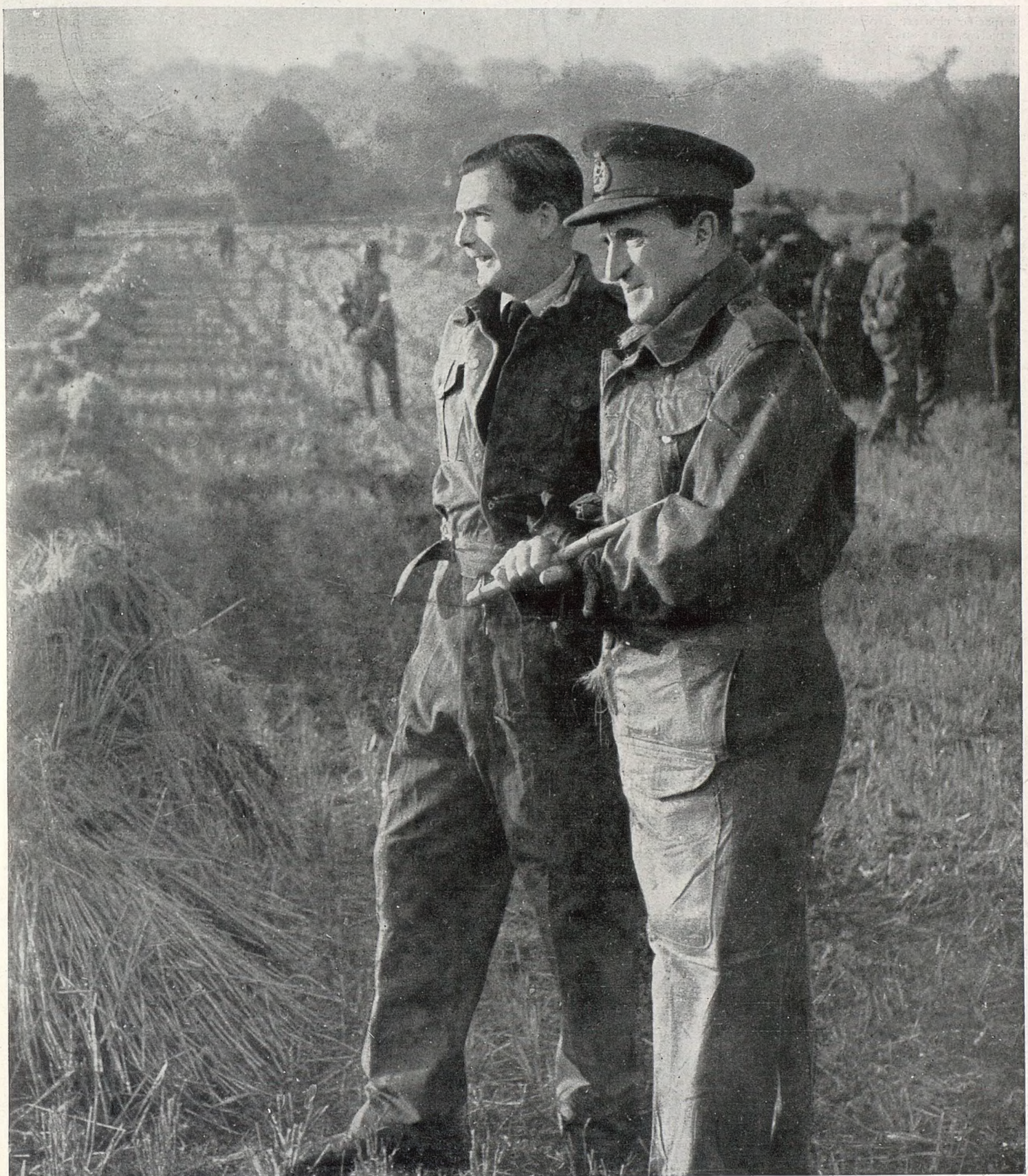

MR. ANTHONY EDEN IN BATTLE-DRESS: THE FOREIGN SECRETARY AND GENERAL SIR BERNARD PAGET, COMMANDER-IN-CHIEF HOME FORCES, witness a big-scale Army exercise in Yorkshire—a picture taken as the tanks were moving off across a cornfield during the operations

The Foreign Secretary and Lieut.-Colonel the Maharajah Jam Sahib of Nawanagar (Indian representative in the War Cabinet) have just returned from a visit to an Armoured Division during a big-scale exercise, when they accompanied the C.-in-C. Home Forces, General Sir Bernard Paget. Leaving their train before dawn, the party donned battle-dress overalls, went aboard tanks, and followed the progress of the battle throughout the day. During their six-hours' tank ride, Mr. Eden, the Maharajah and Sir Bernard Paget passed over some of Yorkshire's roughest country, watching the armoured vehicles, artillery and infantry in action from close quarters. They also saw Army Co-operation aircraft come into action within a few minutes of a radio call by the Army

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A WAR NEWSLETTER—No. 162

1, NEW OXFORD STREET, W.C.1.

The Primate's Great Speech.—The Primate made a great speech on September 26. I judge it to have the importance of an Atlantic Charter put out by Church and State—a pacific charter, if you will, constructive, sane and temperate. Here is the even mean, in nothing petty, in nothing party, the right line to charting, stabilising and directing the road to that New Order which rose in the distance, not by man's deliberate building, but by lapse of time and by the stresses of war. Some have already violently criticised the Archbishop for interfering in politics. Myself, I see all the difference in the world between a Bishop setting forth with clarity and statesmanship the Church's standpoint in the reorganisation of practical affairs in the body politic, and, for example, the same Prelate arranging in detail the post-war control of the Ruhr industries, designed to prevent future wars of aggression by Germany. The first is sheer necessity and relevance. The second is premature and *ultra vires*. The Bishops were given, and have for centuries enjoyed, a voice in our legislature. That voice was clearly given them for the purpose for which the Primate raised it on September 26. To-day most of the world realises (and nearly all of us in Britain) that without those principles which it is, above all, the Church's business to inculcate, there can be no lasting peace for civilisation and no new order for Britain or Europe or the world. Nor should we hesitate to applaud Dr. Temple's statesmanship when we approve his right to speak as a Churchman. The old party shibboleths and system are anathema to perhaps a majority of the nation. Outworn, condemned and proved unworthy and ineffective, we dread their revival, and we suspect those politicians who still cherish and would revive them. We are not less aware of the many faults and anachronisms in the structure of our social and business organisation. That majority of the nation knows pretty well that to-day and to-morrow the future of Britain lies under the ægis of sane socialism which can exist and prosper and construct, without State control carried to totalitarian lengths and without destroying democracy or individual freedom and initiative. The Sermon on the Mount, indeed, presents the structure of that sane socialism, and I think Dr. Temple has preached sane and practical politics from that Book, as surely he is entitled—indeed, bound—to do. Many people may criticise and question details of the speech—some parts of it may be adjudged *ultra vires* or based on insufficient information—but its broad principles are incontestable.

A Long War.—That great pundit, Lord Hankey, created a certain amount of "despondency and alarm" in one of his recent articles, through a misunderstanding. The great wars of the past have been of varying length, but the average length works out at ten years. Readers leapt to the conclusion that (on the *verb. sap.* of the great pundit) the present war will last ten years. But Lord Hankey is a modest pundit, and he hastened to disclaim both the power and the intention to define exactly the length of this war. In this he was as wise as one would suppose him to be. Prophecies about wars, their direction, scope, length, strategy and economic or political consequences, are piecrust of a flabby kind. Let us take a more cheerful view by marshalling some of the imponderables of war which may upset the apple-cart of gloomy prophecy. Remember first our now most hackneyed poetic wisecrack: "It *may be* in yon smoke concealed your comrades chase e'en now the flyers. . . ." The fog of war is dense. We know not 5 per cent. of what is taking place in Germany; of the truth about Germany. In our speculation and sparse information, we exaggerate and we under-estimate. Who would have prophesied in April 1918, when Germany was hammering at the gate of Amiens and the 5th Army was, like Charley's Aunt, "still running," that even then Germany's number was up and the end certain and in sight? There are imponderables in the fog. And here are some more whose power to guillotine should not be forgotten nor under-estimated. I put them in this order: the sudden break-down of the whole machinery of civilised existence; the sudden spectre of European famine; the sudden catastrophe of world-wide disease, such as malignant influenza; the sudden death of the arch-criminal leaders. Our pundits make their little calculations on available statistics of war output, on available resources in hand among the combatants, on estimates of morale in this country or that, on the possible dates and weight of offensives from the air, by land and by sea in this theatre or that. But man who launches wars does not always have the honour of ending them. It was so with the Armada, and I could name one or two land-fought world wars which owed their end to the intervention of Providence. Victory is still about 90 per cent. chance (to call it by no higher name), 9 per cent. your enemy's errors and 1 per cent. your own providence and efficiency. Let us prepare for a long war. It is insanity to fold our hands and wait for the intervention of Providence. But in the dark months ahead, let us not forget the imponderables, but remember how the perils of 1588 and 1918 were suddenly dissipated. "God blew with His winds and they were scattered"—and Queen Elizabeth at least had the humility to ascribe the honour where it was chiefly due.

THE KING PAYS A VISIT TO PORTSMOUTH: A few days ago His Majesty carried out an inspection of naval establishments in Portsmouth. After taking the salute at a march past, he made a tour of the port; and then took lunch on board H.M.S. *Victory* with Admiral Sir William James, who struck his flag that day as C.-in-C., Portsmouth. (Sir William's successor is Admiral Sir Charles Little.) This picture was taken as His Majesty stopped in his tour for a word with a W.R.N.S. despatch rider. Admiral James is in the centre

Changes His Tune.—We are entitled to chuckle (if we can do it without superior airs) at "the things they say" in Germany. But (lest we forget!) let us admit that all nations in the stress of war are apt to change their tunes, sing high, sing low, and philosophically make blessings out of expedients, friends of enemies, and tin gods out of hornèd devils. If you will remember the different tunes you sang about the Soviet Union in 1939, in 1940 and to-day, you may join me in a laugh over Goebbels and Burgomaster Fieler of Munich. Goebbels, in a recent weekly broadcast article, was gloomier than usual: "The war has extended into unimaginable dimensions. It has been hard and relentless against our nation. We are confronted with an adversary who would shrink from no means to strike us down. Nations are strongest when they are fighting for their lives. That is the case with us to-day." Yes, war is a dangerous juggernaut to set loose; it has a will of its own. It breaks all rules. So, too, your victim; who sometimes proves "*méchant et se defend.*" And the High Burgomaster of Munich, after the last raid on his city: "We Germans, and especially we Munich people, knew no hatred, no craving for vindictiveness, against England." These are sorry words. Do they remember an ineffective, rather pathetic old man (with an umbrella), who flew across to Germany twice in 1938 and 1939, and was cheered to the echo by many Germans when he emerged from a conference with Hitler, bearing in his despatch-box peace (as he believed), though not quite peace with honour? Do they remember that there is a Brown House from which have been trumpeted the triumphs of German arms which so swiftly followed the tearing-up of that scrap of paper by Hitler's action, endorsed by the whole slave-nation greedy for the loot and glorying in Germany's new honours rooted in dishonour? We are entitled to a chuckle, provided we remember that changes of tune are common to mankind, and especially so in war.

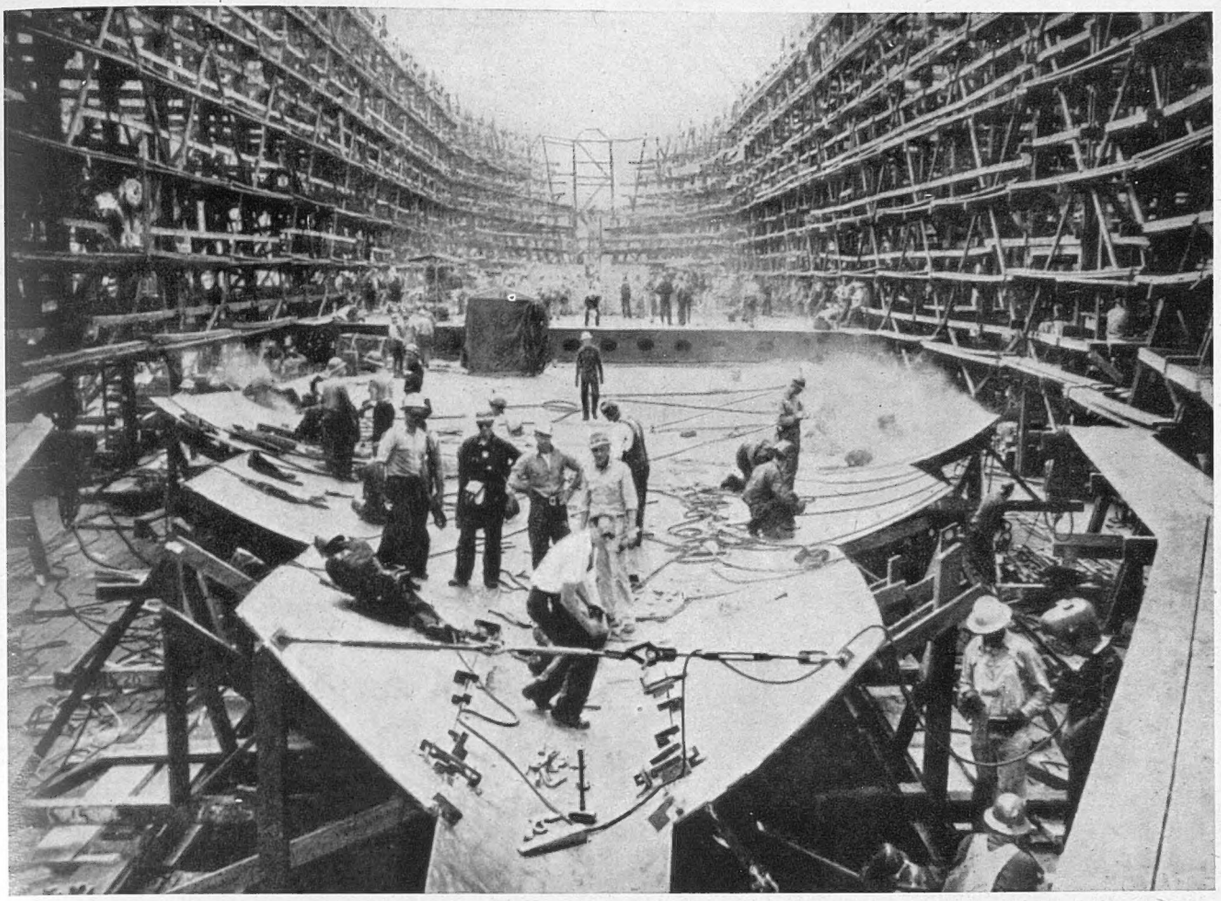
"Screwtape Letters."—Mr. C. S. Lewis, of Magdalen, is a best-seller and a very-much-listened-to broadcaster. There is for those who deplore the low standard of our national intelligence (such as Mr. A. L. Rouse) something surprising and perhaps heartening in this fact. For Mr. Lewis sometimes puts his glittering wares in his shop-window in a form which obscures rather than enhances their glitter. The *Screwtape Letters* struck me as an example of that. The wisdom and pith of his observations of human nature are remarkable and sustained. The form which contains them struck me as dull, donnish and antiquated, even tiresome. I confess I never cared much for these whimsical, *Erewhon* methods of setting forth wisdom and building new worlds, from Bunyan and Swift down to Butler and the Oxford academicians. It has, therefore, surprised and heartened me that his little *jeu d'esprit* of pure wisdom and realism and frank cynicism has won so many admirers and called for so many new impressions already; for the reader has to work like any digger to extract the nuggets from the dull grey clay. But there are nuggets in plenty: "A woman means by Unselfishness chiefly taking trouble for others; a man means not giving trouble to others." "When a learned man is presented with any statement in an ancient author, the one question he never asks is whether it is true. . . . Thus great scholars are now as little nourished by the past as the most ignorant mechanic who holds that 'History is bunk.'" "The man who truly and disinterestedly enjoys any one thing for its own sake and without caring twopence what other people say about it [i.e., as opposed to caring about the 'best' people, the 'right' food and the 'important' books] is [not only a rarity but] forearmed against the subtlest attacks [of the Devil]." There's some wisdom for you in a word's worth.

Poet Laureate—It may be argued that a brief appreciation of the Poet Laureate is not a subject for a War Commentary. I dissent. The "kitchen front" is constantly stressed and advertised as a red-hot war effort topic, and so is the recreational front. The Poet Laureate (unlike most Poets Laureate) provides in abundance food and recreation for the war-weary mind. I don't recall any earlier P.L. who was so shy of adulatory royal odes or so prolific of first-rate novels of adventure for boys of all ages, written in a style which is not only a model for all literary aspirants, but exactly meets the needs of our hectic days. John Masefield has been recognised in his lifetime by authority—he is of the O.M.—but even now is not fully appreciated by the general public. He is a genius of great range and versatility. In the literature of the sea, of the English country scene, of English sport, he stands almost alone to-day. Conrad and Clark Russell, perhaps, in their different ways, were his peers on the sea; Gray, Crabbe and Wordsworth in the country scene; Whyte Melville *et hoc genus* might claim some of his knowledge of British sport. But few of them could claim his happy marriage of insight and knowledge with a style ideal in prose or verse for the literature of action and doubly ideal for wartime reading and the war-worn mentality. As a novelist of adventure tales, the masters of the past seem to-day to pale in his light. Stevenson's masterpieces hold their ground: *Ballantrae, Weir, Treasure Island* perhaps. His lesser efforts recede: *St. Ives, Kidnapped, Catriona.* The minor masters of the genre, from Henty to Buchan, fall into lower category. With Masefield, the vital ingredients are all there at their freshest: the power to tell a tale, to keep it relevant without sacrifice of atmosphere, to make it *real*, to keep it moving and to set it forth in the terse, clear prose of action. I can think of no more godsent parcel for a young man in a prison camp or hospital than this: *Jim Davis, Bird of Dawning, Odtaa, Taking of Gry, The Hawbucks*, with *Reynard the Fox. Jim Davis*, by the way, is omitted from his *Who's Who* bibliography.

THE OLD STAGER

The LIBERTY SHIP which was BUILT in TEN DAYS

Three Pictures of Mr. H. J. Kaiser's Great Shipbuilding Feat on the Pacific Coast



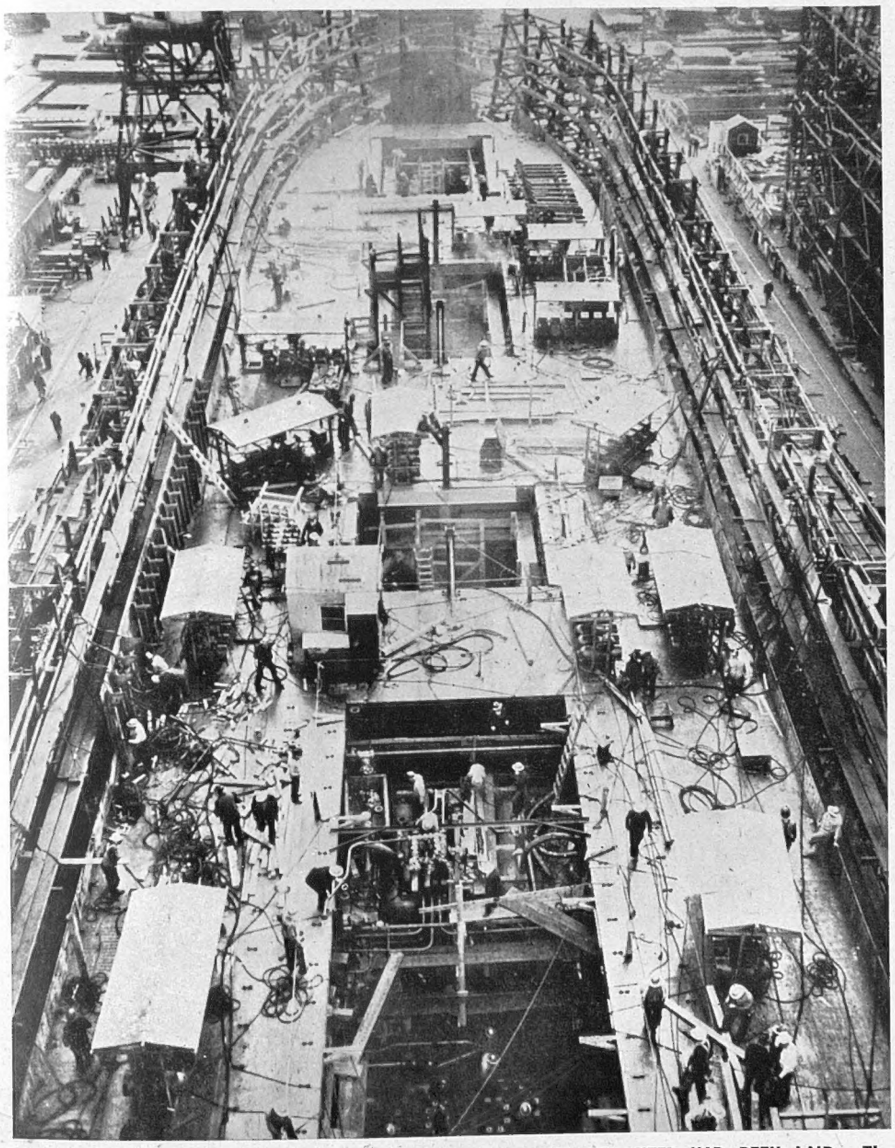
EXACTLY NINE DAYS AFTER THE ABOVE PICTURE WAS TAKEN, THIS LIBERTY SHIP, OF 10,500 TONS, WAS LAUNCHED at a U.S. shipyard, to establish an all-time construction record. Here workmen are seen busy on the ship's bottom the same morning as her keel was laid. The previous best in ship construction was twenty-nine days

MR. H. J. KAISER has already performed wonders in the construction of seagoing merchantmen; but his recent achievement has staggered the whole world — especially, let us hope, the Germans!

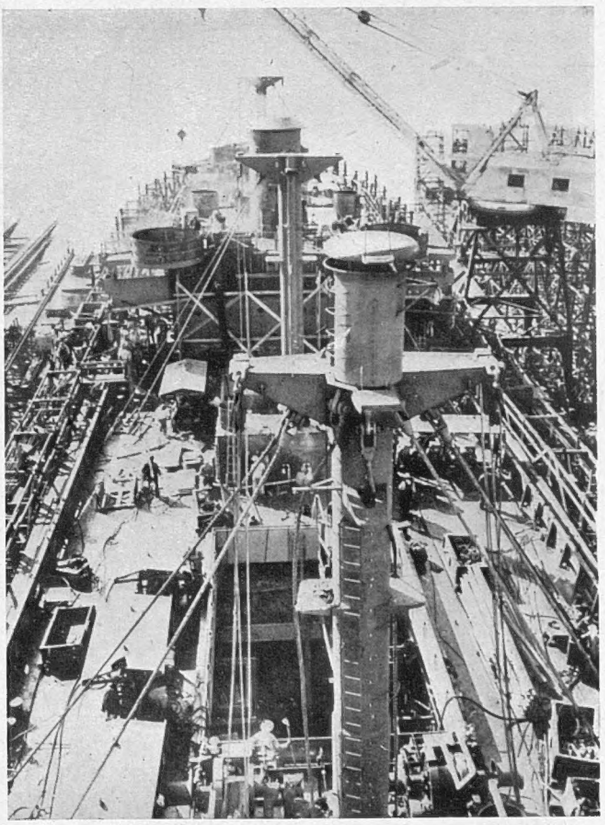
Within ten days he built and launched the 10,500-ton cargo ship shown in these three pictures, and within another four days had handed the vessel over to the Maritime Commission complete down to the last detail and ready to proceed straightway to sea. His previous best had been twenty-nine days, so that the new Liberty ship was actually completed in under half the time of the world's previous best.

The new ship was launched 87 per cent. complete (as compared with the average 79 per cent. completion of routine shipbuilding jobs); her boilers had been installed whilst she was on the stocks, and when she hit the water, the new vessel actually had steam up. Men were hard at work throughout the launch completing their tasks, and they carried on with their jobs as the ship was running her trials.

When the contracts for Liberty ships were handed out, it was estimated that they would take 105 days each to construct: in August this was reduced to an average for all shipyards of 82 days. Mr. Kaiser himself predicted that "within a few months" his yards would be launching 10,000-ton vessels in 18 days; his record-breaking vessel was launched less than one month after that prediction.



WELL ALONG TOWARDS COMPLETION ONLY FIVE DAYS AFTER HER KEEL HAD BEEN LAID. The ship is already taking shape, with decks laid and with heavy engines going down into the engine-room amidships. The whole secret of such record construction is, of course, "pre-fabrication," whereby most of the ship is built in factories remote from the shipyard

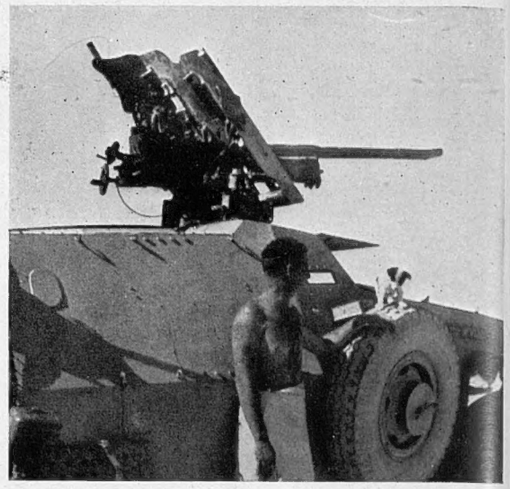


THE 10,500-TON LIBERTY CARGO SHIP READY TO GO DOWN THE WAYS AT THE END OF TEN DAYS. She was 87 per cent. complete at the moment of launching, and within another four days she was handed over to the Maritime Commission complete in every respect. Even as she was launched, workmen were still aboard carrying on with the job

PICTURES from EGYPT

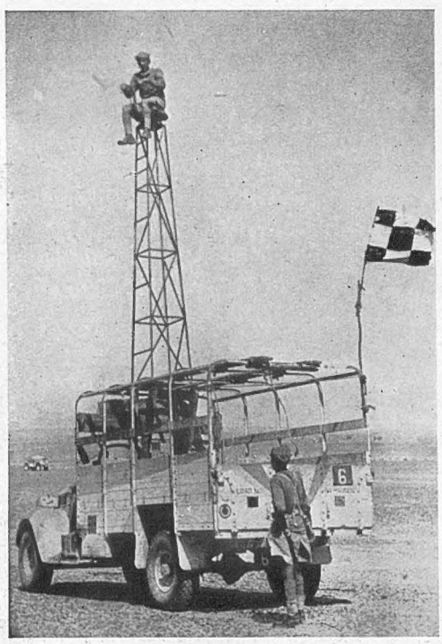
Where the 8th Army and the Axis Forces have Once Again been Engaged in Heavy Fighting

BOMBING THE AXIS SUPPLY LINES IN EGYPT: More than a score of bombs from Allied aircraft are here seen bursting on their target during an attack by light bombers on a concentration of Rommel's motor transport. Vehicles which have escaped the full force of the bombs are seen as tiny specks amidst the sand. By day and by night Rommel's supply lines are being pounded in this fashion

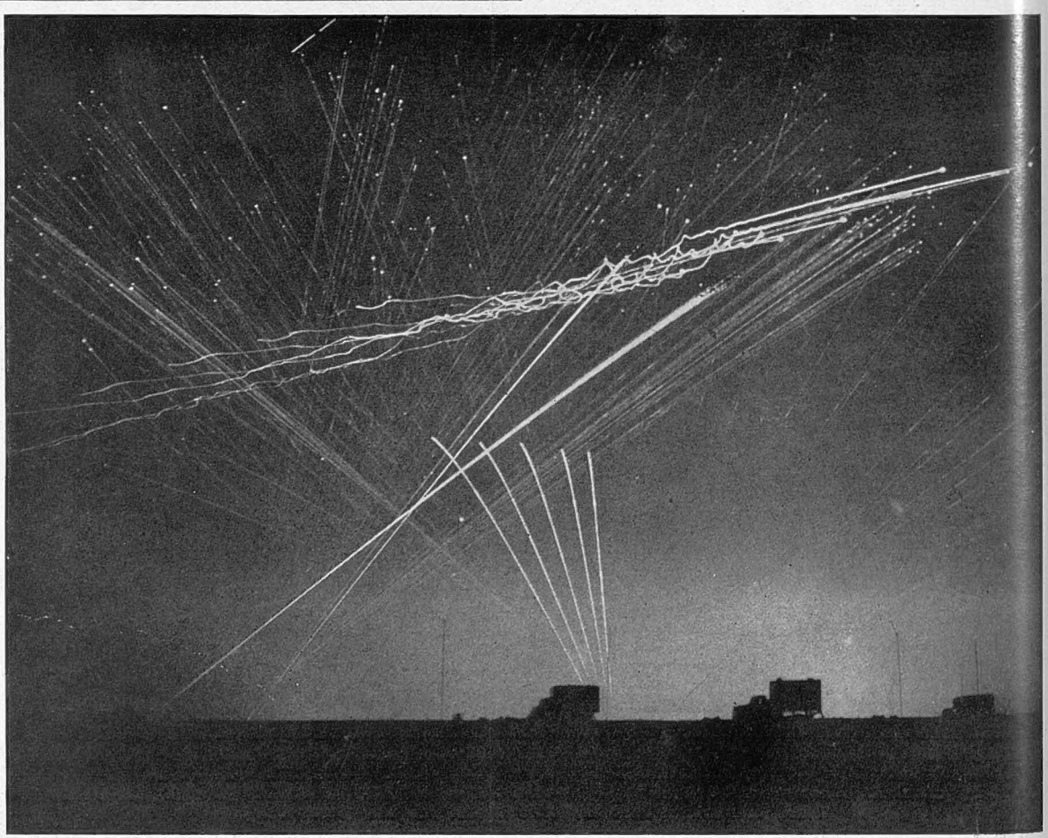


A SOUTH AFRICAN ARMOURED CAR fitted with a captured German 37-mm. cannon and Italian sights. Good results are stated to have been obtained with this equipment during reconnaissance trips

A NEW B.B.C. RECORDING VAN for use with the 8th Army in Egypt: the evening meal for the personnel who operate it is in progress



SPYING OUT THE LAND: An Indian soldier perched on top of the "Jock Ladder" of a specially-constructed observation car in the Western Desert



A BARRAGE OF FIRE MEETS AXIS RAIDERS OVER AN R.A.F. DESERT AIRFIELD: A remarkable close-up picture taken on the ground by an official photographer who was sited in a shallow hole in the sand. Shells and tracer bullets are throwing their deadly ribbons of fire into the night sky. On this occasion the enemy raid was frustrated, and one Axis aircraft was brought down in flames

U.S. HOWITZERS WHICH ARE NOW IN ACTION IN EGYPT—This is one of the American-built 155-mm. howitzers: they were originally designed in France, but are now made by our Allies. Men of the Medium Regiment, Royal Artillery, operate these powerful weapons; and, above, gunners are seen removing the camouflage nets prior to going into action

AXIS SUPPLY LINES UNDER ATTACK FROM THE AIR: A direct hit is scored by Allied bombers on a railway station behind the Axis lines, an important link in their supply routes in the Western Desert

A FLEET in SEARCH of its BASES

What is to Happen to the Soviet Fleet in the Black Sea?

By FERDINAND TUOHY

A YEAR ago the Russian Black Sea Fleet was no mean armada based on Odessa and Sebastopol, first-class naval harbours, repair and supply depots. It was a fleet of all types, from battleships to the Soviet equivalent of E-boats, and it included a sizeable air arm. Its exact composition had, however, proved too elusive even for foreign experts, and as it was driven steadily eastwards from the Rumanian border round to Novorossisk and beyond, as it suffered month after month under the *Luftwaffe*, from mines, from Axis small craft, and under bombardment in harbour, notably during the first stages of the attack on Sebastopol, its component parts became more of a mystery than formerly. The German communiqués sank it several times over, while the Russians said nothing.

That the fleet of last October is considerably reduced cannot be doubted. Time and again it has valiantly helped the Soviet land forces by staying on to the last moment, by convoying, by engaging in combined operations, by landing marines, by outflanking the Germans, as on the Kerch Peninsula. Some of its best vessels had to be left on the stocks and others could not be repaired before the enemy arrived with air "blitzing" and long-distance shelling. And all the time it was subjected to attack from fast torpedo craft and U-boats, and by bombing. Its means of recuperation came to be less and less as fine installations and docks had to be left behind, to say nothing of munitions and equipment.

If the withdrawal round the Black Sea coast had stopped at Novorossisk, the position would have been tricky enough. This subsidiary base was no ideal spot. Far too close to enemy-occupied airfields, its anchorage and repair facilities were imperfect. Yet the Russians had had several months in which to instal movable equipment from Sebastopol, while a fairly deep and partly-sheltered harbour could have taken care of the important submarine element and of surface vessels up to light cruisers.

But when the bigger ships were cast back on Batum and the smaller craft strewn between two or three insignificant ports to the north—Poti, Soukhoum Kaleh, Pitzunda—the immediate future of this Soviet naval force became grim and very uncertain.

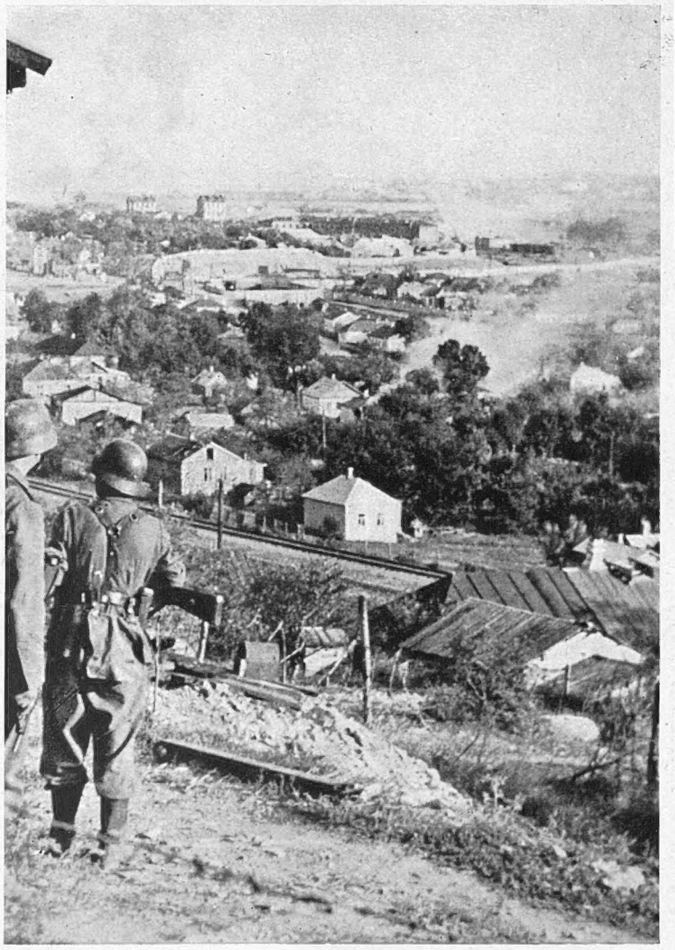
In its final fastness at Batum, situated in the extreme south-east corner of the Black Sea, the fleet's composition has been neutrally assessed as one battleship, five cruisers, about fifteen gunboats, destroyers and torpedo-boats, minelayers and auxiliaries, as many submarines, and small motor-craft in proportion. If this is anything like a true picture, what these vessels lack in condition and outfitting they assuredly possess in hardened crews as experienced in this war's naval occasions as most other ships' companies. But unfortunately, Batum is no place at all for a force as hard put to it as this has been. Batum has lived on oil and cargo traffic and has had little thought for a navy and its docking. Its anchorage is shallow, and, worse, subjected to constant gales which have in the past regularly necessitated ships at anchor putting out in a hurry. Otherwise there has always been a danger of collision.

A British Admiral recently visited Batum. Maybe plans are afoot to strengthen its naval and air defences; also to restock and refit the Soviet warships now cut off from all their own bases. But we know the appalling distance everything has to travel to this Black Sea corner which will be a constant temptation to Hitler from now onwards. Winter weather need not stop the Germans making their way towards Batum; indeed, with this very region in mind, General Wavell told us how climate is being beaten in this war. If Batum were rendered untenable for them—a circumstance which might come about other than by enemy pressure—the Russian sailors would have no other Black Sea port to go to. They would be faced with one of these alternatives: capitulation, internment in a Turkish port, scuttle, or a voyage through the Bosphorus.

The Germans are determined that it shall not be the last of these alternatives. True enough, if this Soviet Fleet were to leave the Black Sea, Hitler would have control of this sea, which he is far from having to-day. One would think that might be enticement enough. But not for Hitler, who wants this fleet accounted for in the Black Sea so that it doesn't start fighting him somewhere else. Hitler looks to be as alive as others to the universally accepted dictum that the decisive battle of all is that of the oceans. He must be chuckling that the Allies haven't done anything about employing the admirable French light squadron at Alexandria. He is determined that they won't even get a chance to make use of the Soviet Black Sea force.

Goebbels has stated the German expectations—demands. "The Montreux Convention definitely opposes the passage of these vessels through the Straits. In due course they can either sink themselves, surrender, or enter Turkish ports and be interned and disarmed." The most likely port would be Trebizond, near Batum, and that would be very handy for the Germans, who, with undisputed command of the Black Sea, could then land at Trebizond, a port that has long attracted them, and, at the same time as putting the heat on Turkey, collect any Soviet warships lying around.

One often wonders why people worry about drawing up international law. Whenever there seems to be a clear case for its application, "various interpretations" are placed upon it. Yet months, if not years, are sometimes spent in splitting hairs at conferences. I remember we started splitting hairs with Ismet over this Dardanelles business back in 1923, at Lausanne, and the hairs weren't finally split until 1936 at Montreux. Finally, did I say? Not on your life! At the present moment interpretations are being advanced from all points of the compass regarding when "vessels of war belonging to belligerent Powers are not permitted to pass through the Straits."



NOVOROSSISK, the former Russian naval base in the Black Sea: A view from the heights overlooking the harbour, taken after the Russians had abandoned the town on September 11. The enemy admitted that the city and heights were well defended by machine-gun nests and bunkers, and that it was only after a hard fight that the area was captured

Under Article 19 of the 1936 Convention, Turkey said she wouldn't let belligerent warships through the Dardanelles and Bosphorus unless they were separated from their bases. In that case they might return thereto. Now the whole argument turns on—which are the Black Sea Fleet's bases? The Germans, of course, bellow that the only bases that can be associated with this fleet are situated round the Black Sea where most, if not all, of the ships were built and where they have spent almost their entire active life. In point of fact, a few of the vessels came from ports like Kronstadt, while others have passed in and out of the Dardanelles at odd times—the Non-Intervention Committee—or was it the Intervention Committee?—ordered the chasing of submarine pirates, at Nyon, in 1936. Black Sea units were on the spot then, ready to co-operate in warlike action with the units of certain other nations.

Unless one is going to lock parts of a navy up in a specific sea, a warship's base in wartime is surely—just as long as she has *one*? Supposing all the bases of the Royal Navy were in enemy hands except Portsmouth and that there was a lone little vessel making for "Pompey"? Wouldn't she have the right to rejoin as long as Portsmouth remained? Isn't it the same in regard to Soviet vessels in the Black Sea and still accessible Soviet bases at Murmansk, Archangel, even Vladivostok? Hasn't each surviving unit in the Black Sea the right to point to each and any of these Soviet naval bases as *her* base? The Montreux Convention said nothing about how long a vessel might take in rejoining her base, or about routes or calls on the way thither.

REAR-ADMIRAL OKTYABRSKY, Commander of the Soviet Fleet in the Black Sea. Ever since the Germans came down into the Crimea, the Black Sea Fleet has done grand work against the enemy: but, owing to the loss of their bases, the Russian warships have been forced farther and farther down towards Batum

At least one of the Turkish signatories at Montreux has given his opinion that, as he understood the Convention at the time, the Soviet warships have the right to quit the Black Sea, and it is to be presumed there was no difference of interpretation between the Turkish delegates themselves at that conference, that all were of a like view—there were not many. Or must one be forced to the conclusion that reluctance to read Article 19 in the U.S.S.R.'s favour derives more from unsatisfactory Turco-Soviet relations and Turkish hesitancy to risk offending the Axis than from any doubt as to what the Article really meant?

The Turks' position seems to be that they would prefer the United Nations to win but that they are not yet convinced that we are going to, and that meanwhile all the ballyhoo by Willkie in Ankara and the glad words in Britain by Turkish editors are not going to move our Middle East ally from his excessively cautious interpretation of international agreements. The difficult and delicate problem endures of Turkey on the tight-rope.

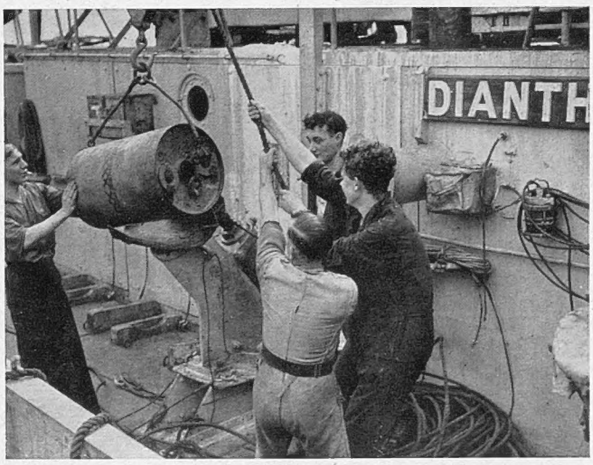
Of course it would be much better for the United Nations, and for Turkey also, if the Black Sea Fleet could manage to hang on in its corner until the turn of the tide. Like that it would be denying Hitler access to the Turkish coast and defending the Batum end of the oil lines. But if this fleet's position should become untenable under *Luftwaffe* attack, owing to land assault, or for any other reason, it is to be hoped that Moscow, London, Washington and Chungking will be fully vocal at Ankara to the end that a gallant naval force shall not in its stress be subjected to internment or scuttling—it would never surrender—but be accorded that right of way through the Straits which the Turkish signatories at Montreux understood and recognised. We have lost too many good things in this war already through not asserting our rights. It would be a crime were the Allies to lose this fleet at a time when every warship counts as never before. One has only to think what it could do helping the convoys into Northern Russian ports. On the way, its appearance in the Mediterranean might almost be calculated to make a few of the Vichy crews there think again.

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this publication should not be taken as an indication that they are necessarily available for export

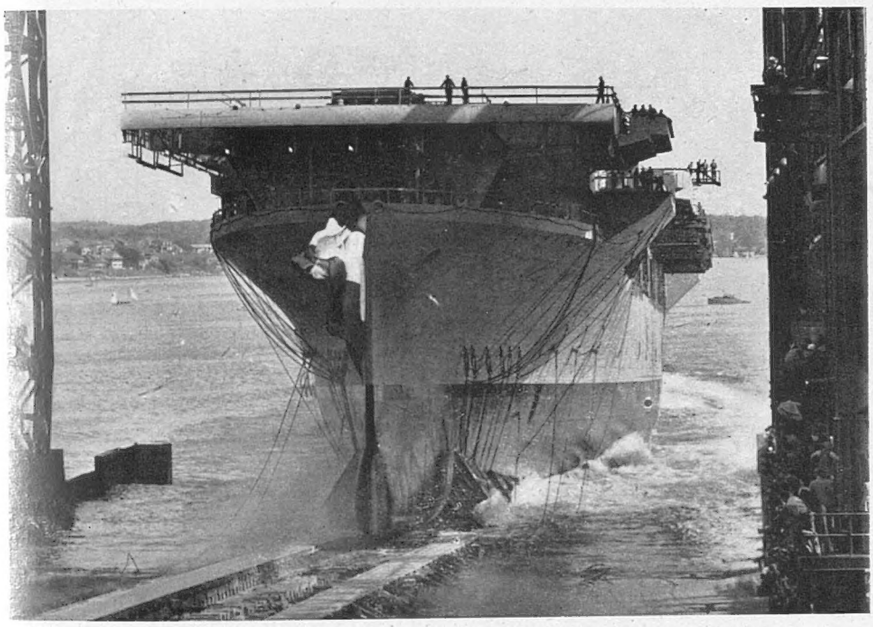
WAR BY SEA AND AIR

New Pictures from Britain, America and Germany

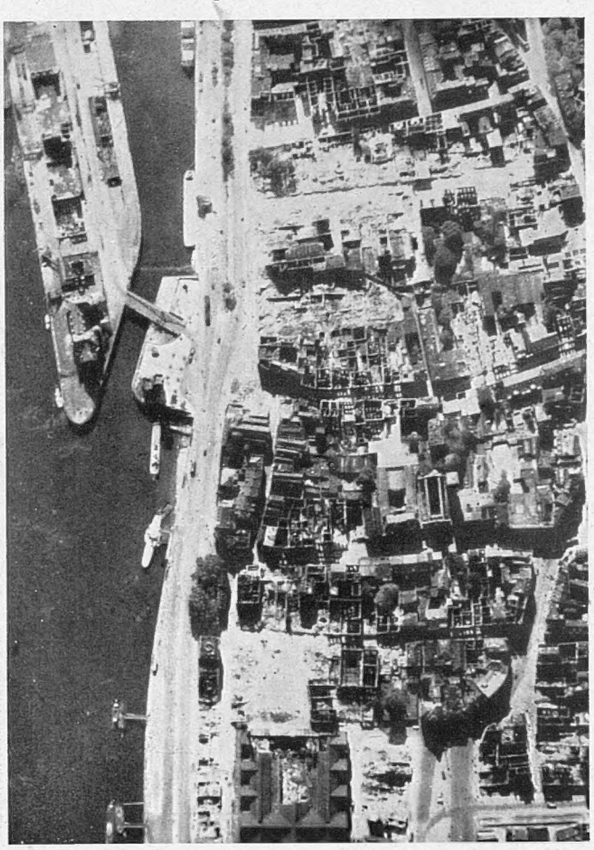
THE BRITISH CORVETTE "DIANTHUS" RAMS AND SINKS A U-BOAT after a three-hours chase : Some of the German prisoners disembarking at a British port. In a midnight battle in the Atlantic, H.M. corvette *Dianthus* (Lieut.-Commander C. E. Bridgeman, R.N.) rammed and sank a U-boat after a three-hours chase. After the submarine had been blown to the surface with depth-charges, the *Dianthus* rammed her four times, blazing away throughout the fight with every gun, rifle and revolver the crew could muster. At the last ramming the U-boat's bow reared up and crashed on the deck of the corvette, following which she sank—a very nasty experience for the crew of the British vessel! A number of German prisoners were picked up, and the corvette then rejoined her convoy in time to rescue survivors from the torpedoed merchant ships. On arrival at their base, the corvette's crew were complimented by Admiral Sir Percy Noble, C.-in-C. Western Approaches, on the manner in which they had fought a great action. *Dianthus* is one of the Flower class. All these vessels are 193 ft. in length, but their value is out of all proportion to their size! The complement of a corvette of this class is fifty-eight



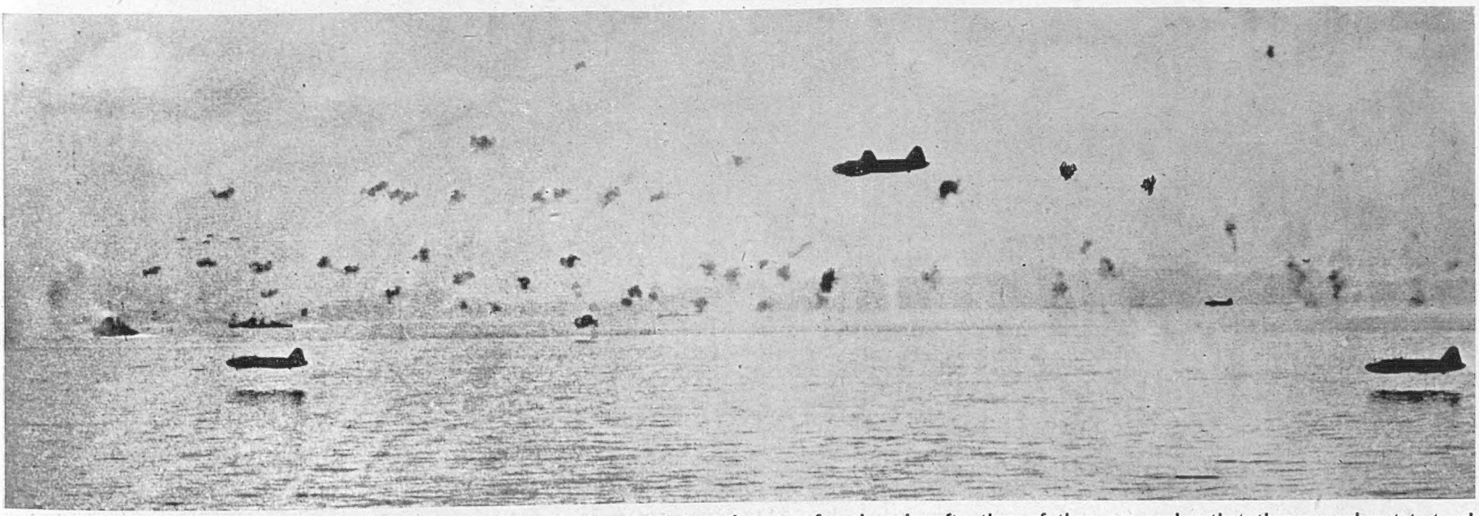
RELOADING A DEPTH-CHARGE THROWER on the corvette "Dianthus" after her gallant action in the Atlantic



THE NEW "LEXINGTON"—AIRCRAFT-CARRIER—TAKES THE WATER at her launching : In the Battle of the Coral Sea, the U.S. aircraft-carrier *Lexington* was sunk by the Japs. She was a vessel of 33,000 tons, completed in December 1927. To take her place in the U.S. Navy—and her name—a new vessel has just been launched at the Bethlehem Steel Company's shipbuilding yard at Quincy, Mass., where this picture was taken as the ship slid down into the Weymouth Fore River



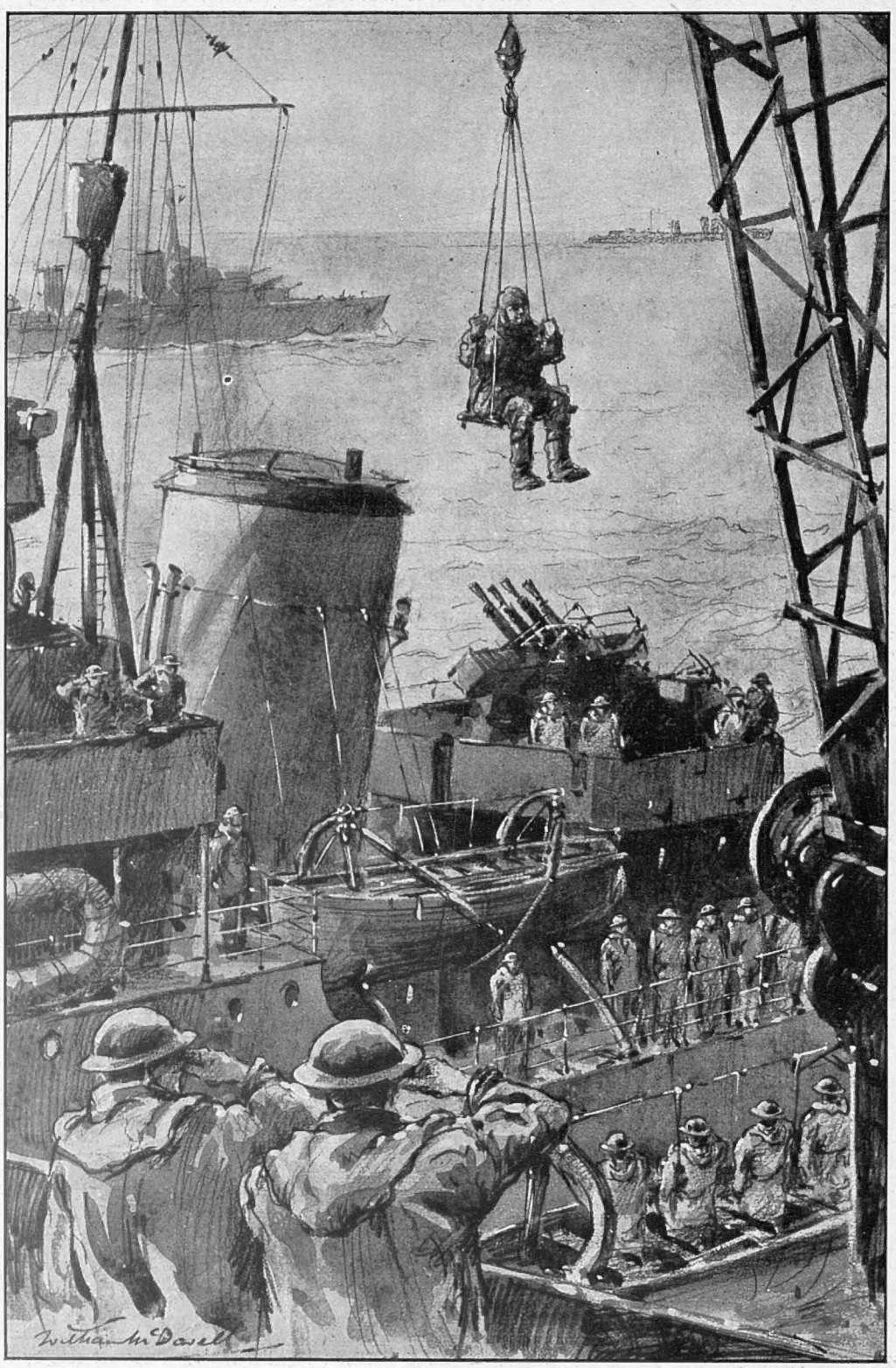
COLOGNE IS STILL CLEARING UP after the 1,000-bomber raid by the R.A.F. in May last : This is an official photograph issued by the Air Ministry : it has just been taken by an R.A.F. reconnaissance aircraft over Cologne. It shows that barges are still engaged on the task of clearing away rubble from the gutted dockyard area in the city—four months after the very heavy raid carried out by 1,000 bombers in May



HOW THE JAPANESE BOMBERS COME IN TO THE ATTACK AT SEA : In this picture there are four Jap aircraft : three of them are so low that they seem almost to touch the water. The planes were carrying out a low-level attack on U.S. warships and transports (some of which may be seen at the left and in the distance). The black smoke-puffs are bursting anti-aircraft shells from the concentrated fire of the American Fleet. The picture was taken during the U.S. operations against the Japanese-held Solomon Islands, when the enemy was routed and the islands recaptured for the Allies

HOW ADMIRAL BURNETT TRANSFERRED HIS FLAG

—"An operation unique in this war," during the passage of the Arctic Convoy



CHANGING HIS SHIP AT SEA: Admiral Burnett is slung in a chair from the cruiser "Scylla" to a destroyer during his return from Archangel with a second convoy—*Drawing by Wm. McDowell*

The manner in which this unique operation was performed on the high seas is here illustrated. Rear-Admiral Burnett was received in true naval style, with all the honours due to his high rank, despite his unconventional method of "coming aboard"!

TWO EXTRACTS FROM THE BRITISH NEWSREEL RECORD OF THE CONVOY OPERATIONS: Out of the danger zone, it was decided that the cruiser "Scylla," which had up till then been the Admiral's flagship, should go ahead of the Convoy. Admiral Burnett thereupon decided to transfer his flag to a destroyer. These two pictures were taken during the operation: the two vessels were lashed together and the Admiral was swung aboard the destroyer in a chair. From the bridge of this vessel he then saw the Convoy safely into port

After the safe arrival in Archangel, Rear-Admiral Burnett, in command of the Escort, promptly proceeded to bring back from Russia another convoy of ships. Wrapped in his Arctic gear, with anti-flash Balaclava helmet, he sat in his high chair on the bridge of the cruiser *Scylla* next to the Captain for most of the voyage, with brief spells for rest and meals.

But, as soon as the danger zone was passed, it was decided that the cruiser had better go on ahead with the survivors, seeing that she had served her purpose as an anti-aircraft ship, leaving the Admiral to continue with the Convoy until it reached "quiet waters." His flag, therefore, was transferred to a destroyer.

To do this, said Mr. Arthur Oakeshott (Reuter's special correspondent with the Home Fleet), an operation was performed which must be unique, in this war at least.

"The destroyer comes alongside," he wrote, "a rocket line is fired over her bows, and she is lashed to the *Scylla*. All the time both ships are keeping the same speed as the Convoy. Then a crane gets to work and transfers the Admiral in a slung chair over the 'drink' and aboard the destroyer.

"True to the naval tradition, six seamen rise to their feet in a boat hanging from the davits and solemnly pipe the Admiral over the side, while the crew stand to attention and officers salute. The destroyer then speeds away, with the Admiral's flag at the masthead. We [on the cruiser *Scylla*] lower the Admiral's flag from our own mast and put on a terrific speed into the gathering dusk alone, but not before we have seen that the destroyer screen is already in action against submarines."

Prior to this incident, whilst the Convoy and escort were northward bound, the *Scylla* had taken part in a notable feat of seamanship. The minesweeper *Harrier* had gone alongside the cruiser and, although the latter was travelling at considerable speed, lashed herself to it and transferred some eighty survivors from a torpedoed merchant ship. This is a difficult feat in peacetime in a smooth sea, but in a high sea with an icy wind and the enemy overhead . . .

Later, H.M.S. *Sharpshooter* transferred more survivors, amounting to well over 100 in all. Many of the ship-wrecked seamen were Americans.

SURVIVORS FROM A MERCHANTMAN OF THE CONVOY sunk by enemy action are transferred from one ship to another during the voyage to Archangel

THE CRUISER "SCYLLA" IN WHICH REAR-ADMIRAL BURNETT FLEW HIS FLAG during the passage of the Convoy to North Russia: She is a vessel of the Dido class, of 5,450 tons, and was only completed in the year 1941

CONVOY TO RUSSIA

—Two Special Impressions by William McDowell

CAPTAIN I. A. P. McINTYRE, C.B.E., R.N., Captain of the cruiser "Scylla," flagship

The recent Convoy under Admiral Burnett was the largest ever taken to Russia: there were seventy-five Allied warships in the naval escort alone. The wall of fire which these put up must have been of a nature unprecedented in this war. The main danger to the merchantmen came from U-boats and from torpedo-bombers: the latter, especially, suffered heavily, as was demonstrated by the fact that a return Convoy from Archangel was not attacked once by the *Luftwaffe*, so severely had they been handled. It was the first time this type of aircraft had been used by the enemy on the North Russian convoy route. Their losses were probably heavier than the forty officially reported by the Admiralty, as it was impossible to see what happened to many of the damaged planes. A prominent part in the rout of the *Luftwaffe* was played by Sea Hurricanes, fighters which operated

(*Continued below*)

MULTIPLE POM-POMS ON A BRITISH WARSHIP blazing at the aircraft attacking the Convoy. This type of gun can literally put up "a wall of flame." When a number of vessels are all engaged on the same task the attackers in the air are bound to suffer heavily

THE FIERCE ANTI-AIRCRAFT BARRAGE PUT UP BY THE CONVOY TO RUSSIA: In the centre a 4·7-in. dual-purpose gun joins in the intense fire concentrated on the attacking torpedo planes. In the foreground a fire-party is dealing with a smouldering deck caused by incendiary bombs

(*Continued from above*)

from an aircraft-carrier in the Convoy. These were adapted for use from a flight deck, with folded wings and modified undercarriage—the first time Hurricanes had been flown from an aircraft-carrier. They were incorrectly referred to by the Germans as "Spitfires"

On right—

REAR-ADMIRAL R. L. BURNETT, O.B.E., who commanded the escort of the Convoy, is fifty-five years of age. In the last war he commanded various destroyers, and then he became the Navy's Director of Physical Training and Sports. He was promoted Rear-Admiral in January 1941

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The AMAZING DEFENCE of the CITY of STALINGRAD: *And the Methods Adopted by the Red Army to Contest Every Building and Every Street*

I. THE OUTER BIG FACTORIES IN THE STALINGRAD SUBURBS WERE CONVERTED INTO VERITABLE FORTRESSES: The city straggles along the west bank of the Volga for many miles; every five miles of streets were organised into a separate "fortress," in which supplies were accumulated for a long siege. As more and more debris fell on the defenders, so their defence points became stronger and more difficult of capture—*Drawing by E. Byatt*

II. THROUGH THE OUTER RIM OF THE CITY, where some of the buildings were occupied by the Germans and others were still held by the Russians. Trams had been overturned to form barricades, enemy tanks wrecked and the progress of other enemy tanks seriously impeded by obstacles and cross-fire. The enemy's freedom of movement very soon became retarded, owing to the tactics adopted by the defenders—*Drawing by E. Byatt*

"STREET FIGHTING IN A TOWN OF 500,000 PEOPLE IS INDEED A PHENOMENON . . ."

It is in the above words that General Dietmar (the spokesman of the German High Command) has described the defence of the city of Stalingrad by the Soviet. "For the first time in the history of war, a big town is offering resistance to the bitter end," he went on. Unlike Paris, unlike any other city in the world, the Russians are seeing every stone uprooted rather than give to the German invaders that easy victory which is so essential to their plans for the subjugation of Russia.

How is it done? How have the soldiers of the Red Army converted this modern city on the Volga into a fortress, or series of fortresses? How have they managed to withstand the might of the German hordes, to defy the enemy's tanks, to scorn all the efforts of the hitherto invincible dive-bombers?

"It must be admitted," goes on General Dietmar, "that fighting inside a town is a most difficult venture. The defenders have the advantages, for they can turn every house into a fortified point and every block of houses into a fortress. In Stalingrad they have used every cellar and every street-corner as the key of a fortification. Now that all our troops are fighting inside the town, tanks are useless, because they cannot operate in narrow streets blocked by barriers and debris. The same applies to our dive-bombers. They would endanger our troops as well as those of the enemy. . . ."

Correspondents with the Soviet Army have given details of how this great hold-up of the mighty German Army has been achieved. Apparently, the defence of the Stalingrad streets had been carefully prepared and is under skilful direction. What is now going on is not just desultory "street fighting," but an operation in which every building is a small fortress, with supplies and food for the defenders and adequate communications with Headquarters.

Once having broken through the city's outer perimeter, the Germans expected to sweep into the city proper as on previous occasions. But the Russians chose to turn the city into a battlefield, in which every house became a nest of pill-boxes, every street a tank obstacle and every factory building a garrisoned fortress—with even the civilian population assisting in the defence of their homes and workshops.

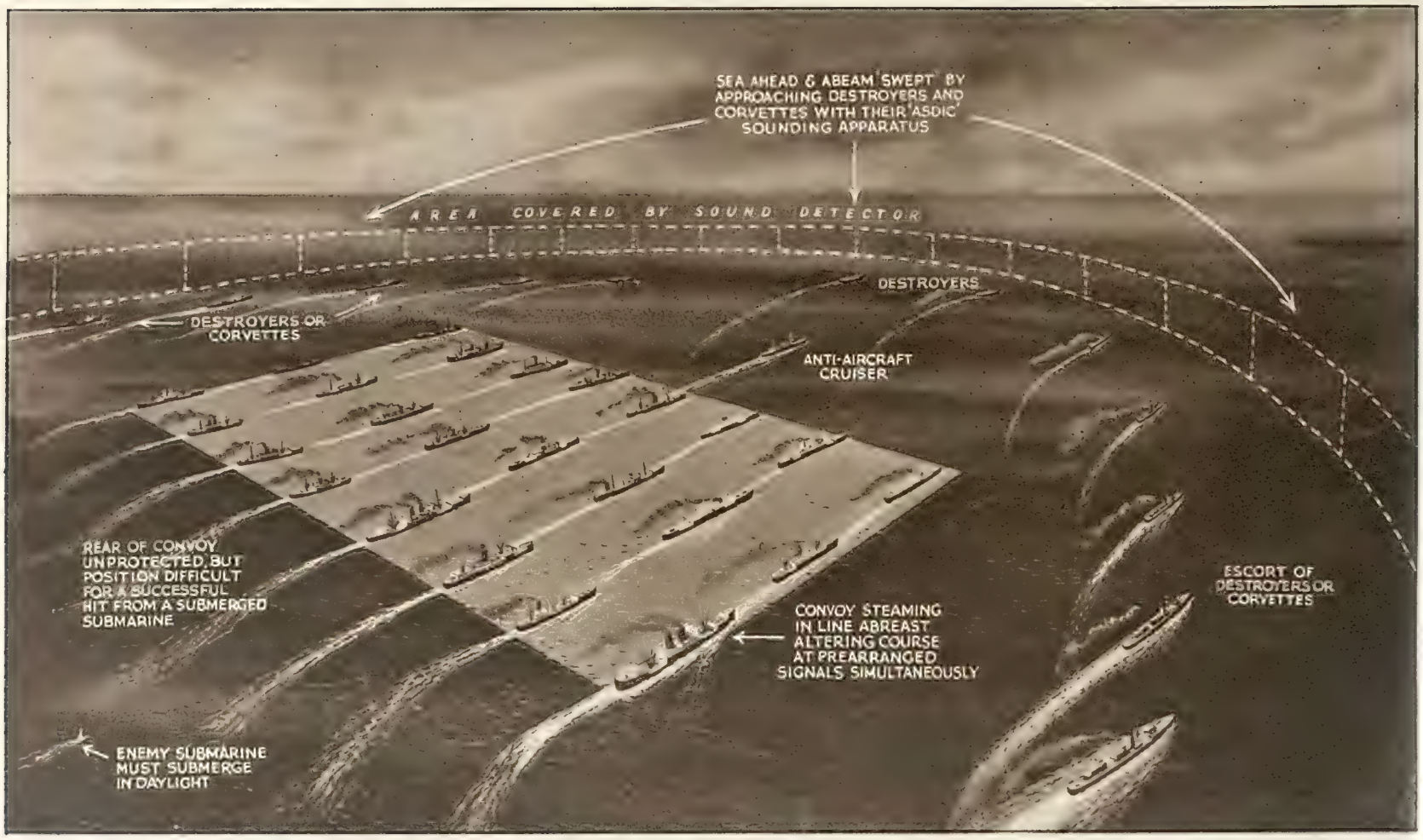
Red Army sappers skilfully mined the Russian tanks when it was no longer possible to fight them; and then they went underground to mine the cellars and basements, to blow them up should the defenders above fail to hold back the invader.

"Everybody must understand," says General Dietmar, "that our troops can only advance very slowly—step by step with hard fighting every inch of the way." And to this the Soviet *communiqués* add that "every room in every house has become a battlefield," and that "Russian and German positions in places are only a few yards from each other, firing is often at point-blank range, with bayonets being used and rifles also being used as clubs."

As a final comment on the heroic defence of Stalingrad, here is a report from a correspondent at the front descriptive of an actual street scene in the city: "At night, infantry fight savage hand-to-hand engagements in darkness lit by leaping flares, exploding bombs and the glow of burning buildings. Fighting through these streets is a matter of creeping from shell-hole to shell-hole, over barricades made of beams and planks from ruined houses. Snipers occupy every remaining roof-top and window. Russian sharpshooters lie hidden everywhere, behind walls or in pits scooped in the earth. The Germans must face fire from every direction at once."

III. IN THE HEART OF THE CITY, HAND-TO-HAND FIGHTING BECAME WIDESPREAD. Scenes like these were general during the big German drive to cut Stalingrad into two parts. So great was the wreckage that tanks were impossible of movement through the crowded streets, and the German dive-bombers were unable to operate owing to the closeness of the fighting. Every square became a battleground, and every building a point of resistance, whilst in the streets guns, rifles and tommy-guns were the principal weapons of both sides—*Drawing by W. G. Whitaker*

IV. WHILST BARRICADES WERE BEING RUN UP IN THE STREETS, and every floor and every room was being fiercely contested by the Soviet foot-soldiers, below the ground-level Russian sappers were hard at work preparing mines. Wherever practicable, Russian tanks were brought up through as-yet-undestroyed streets to support the infantry; when resistance ended in the streets, the mines below the streets were fired—*Drawing by Percy Home*



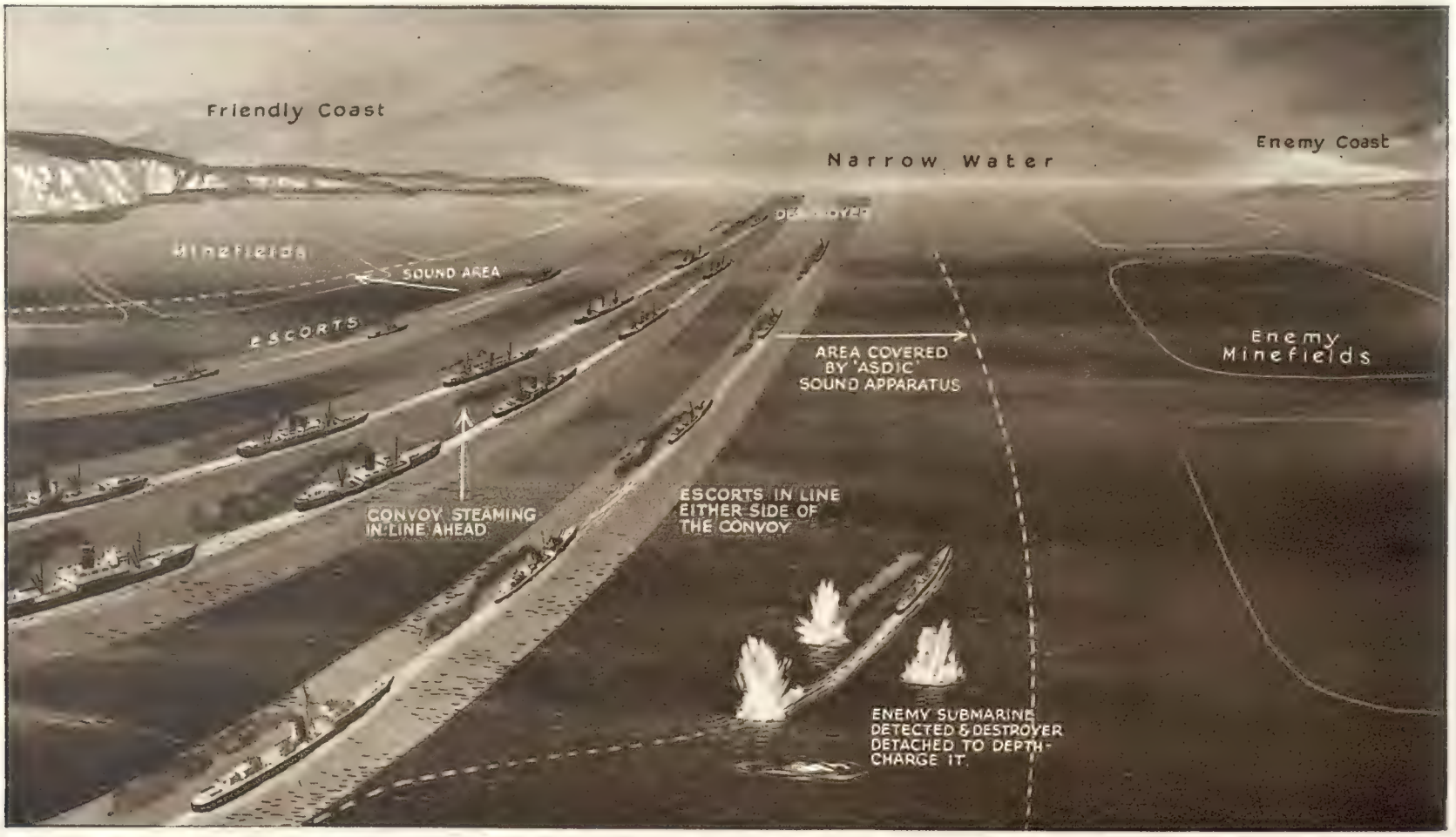
1. WHEN FAR OUT AT SEA, where the chief danger is from U-boat attack, the vessels are arranged in line abreast, with destroyers leading, and destroyers or corvettes on the flanks. This arrangement forces the German submarines towards the rear of the armada, where only stern shots can be launched—an unfavourable position for the U-boat commanders—*Drawing by E. G. Lambert*

BRITISH CONVOYS AT SEA

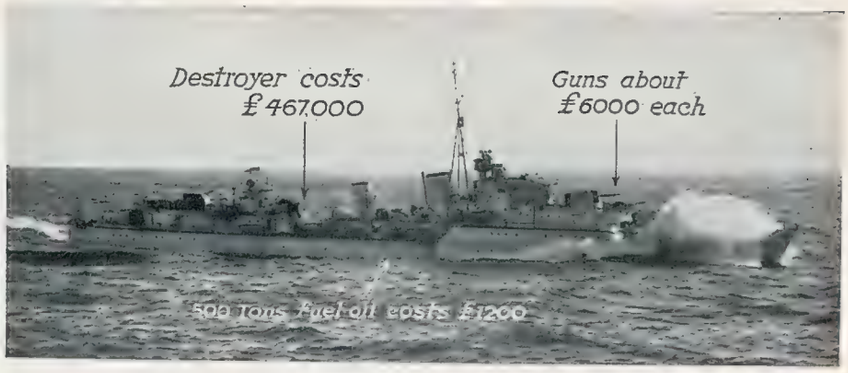
How They Proceed in Open Waters and the Change of Tactics Necessitated by Narrows

When far out at sea, the principal danger to a Convoy is from U-boats. For this reason the ships of the escort are usually arranged in the manner illustrated in the upper drawing. Ahead go the destroyers, and on the flanks are more destroyers or corvettes: preceding the merchantmen, also, is usually one, or more, anti-aircraft cruisers. In this way, the sea ahead and abeam is constantly swept by the Azdic apparatus, which quickly denotes the presence of any lurking submarines. The enemy U-boats must of necessity, under these conditions, attack from astern: but every few minutes the Convoy changes its course in a pre-arranged zigzag, to upset the aim of the lurking U-boats or to give them a false idea of the Convoy's course. Should an air attack also develop, the A.-A. cruiser is favourably placed for instant despatch to any threatened point, a task in which some of the escorting destroyers would join, closing in wherever desired. By day the U-boats *must* remain submerged: at night, when they can surface, a re-grouping of the warships to cover the now vulnerable stern would take place.

Approaching narrow waters new tactics must be adopted: in the channels, with mine-fields on both sides as an additional hazard, a line-ahead formation must be adopted (as shown in the lower drawing). The escort vessels close in on the merchantmen and range up and down the line, the greater number of the stronger vessels being on the side of the enemy's coast, where attack from the air is most likely to develop first. The cruisers would either be within the line of destroyers or scouting ahead—in one long line abreast. Should there be an aircraft-carrier with the Convoy, she would be at the rear of the line, ready to drop out of station to turn into wind and fly off her aircraft: during this operation she would always be attended by her own special escort.



2. BUT WHEN THE CONVOY APPROACHES NARROW WATERS THE CONDITIONS ALTER. The enemy's land aerodromes are now close at hand, and there is great danger from the air as well as from the sea. The merchantmen and their escorts, therefore, switch over to line-ahead formation, with the stronger warships facing towards the enemy's coast, ready to bring a strong concentration of A.-A. fire to bear—*Drawing by E. G. Lambert*



WHERE THE MONEY GOES: A "Facts-and-Figures" Study of the Cost of Modern Fighting Equipment

By A. P. NEWALL

AT one of the pre-war Navy Weeks, so the story goes, a Cockney prolonged his visit to a battleship unduly, on the grounds that, as a taxpayer, it was his property. "All right," said a burly bos'un, presenting him with a match-stick-size sliver of teak, "here's your share; now hop it!"

As a rough and ready approximation, the bos'un's estimate was probably correct enough. Despite heavy increases in direct taxation, now estimated at £31 per head a year, the fact that there are 50,000,000 people sharing the £14,000,000 a day war costs in these islands acts as a damper on any undue spirit of proprietorship.

If an exact bill could ever be drawn up, it would probably be found that, in Mars's household accounts, as in those of humbler establishments, it is the unconsidered trifles that run the costs up. A battleship such as the *Rodney* may add £7,750,000 to the bill, but it is the cost of giving Pte. Atkins of the Loamshires his daily food, and a bit of spending money, plus a new pair of boots and a free travel voucher home occasionally (multiplied by several millions), that really runs up the bills. The new improvements in pay and allowances announced only recently will cost us about £43,000,000 a year, or enough to buy half-a-dozen *Rodneys*.

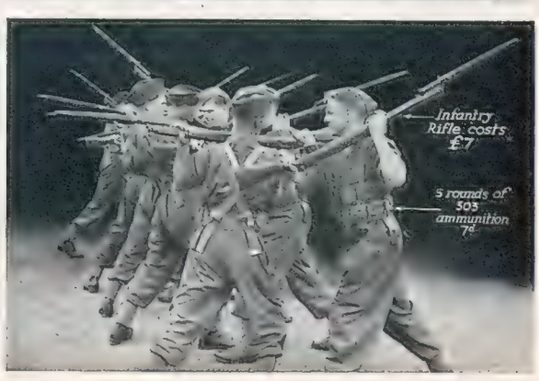
On the *matériel* side, the accounts of the Quartermaster-General would make interesting reading. Even if not quite so detailed as to include "socks, grey woollen, Pte. Atkins, for the use of—per pair, 1s. 2d.", they nevertheless contain quite a few plums for future historians. Each Matilda, or, more officially, "Tank, Infantry, Mark II," adds £20,000 to the debit side of the ledger, which seems a very fair price for its 28 tons of armoured mechanism. The Valentine lets us down a little more lightly at a modest £15,000, equal to a little under £1,000 a ton. If it is any consolation, Uncle Sam has to dip equally deeply into his pocket. The U.S. Army's latest 57-ton tank costs about £29,000, which is probably on a par with the bill for our own Churchill.

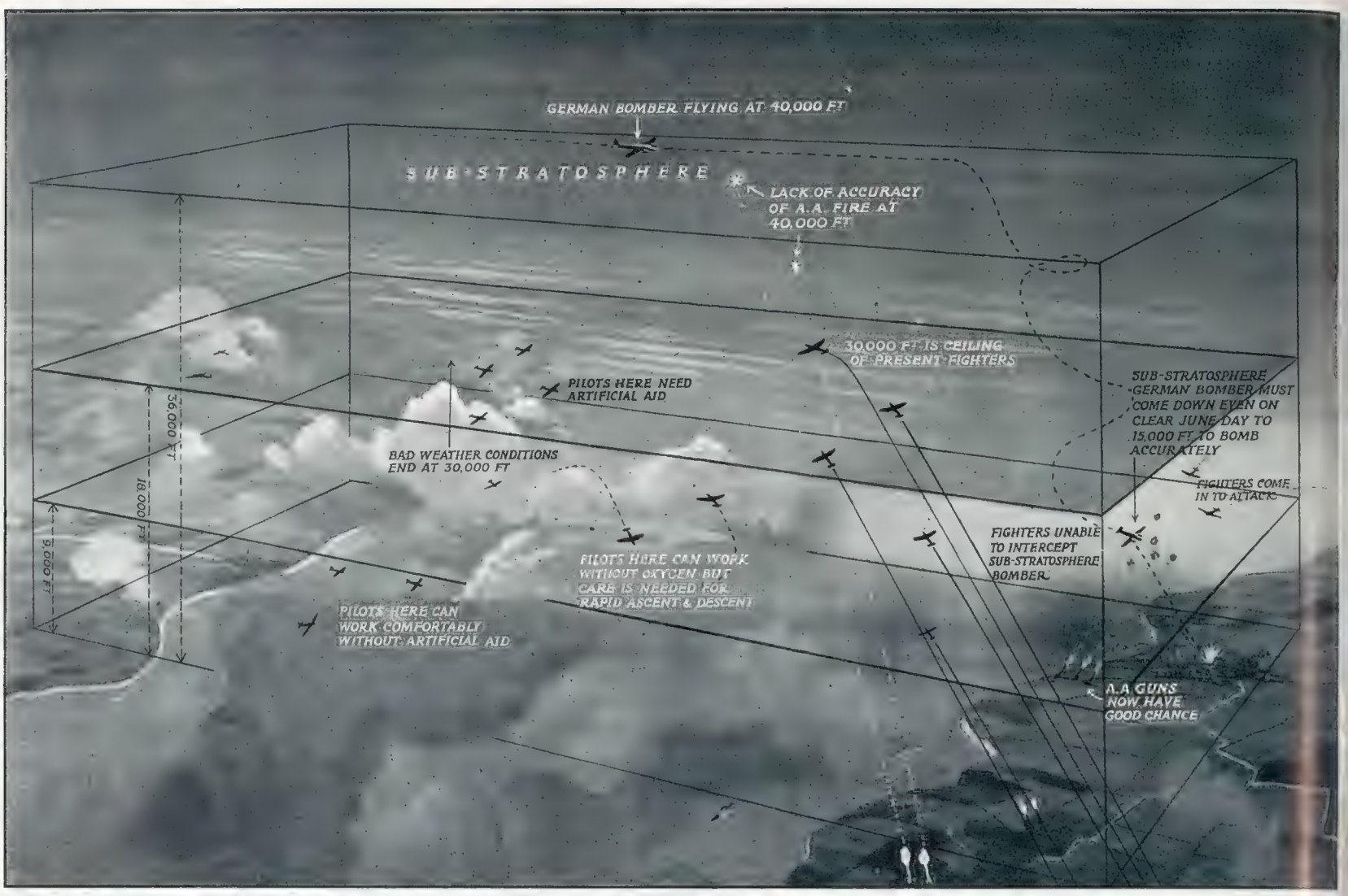
Turning to the lesser fry for a moment, the infantryman's rifle costs £7, and 7d. for every clip of five rounds of ·303 ammunition. The Home Guard's Sten gun works out at 26s. a time (that is, taking advantage of the quantity discount on large orders). Those Home Guards whose trigger-fingers are itching should remember their second role of Mr. Taxpayer, however. At 30 rounds of 9-mm. ammunition per clip, and at 3s. 6d. per clip, the Sten can shoot its own cost in ammunition in less than 30 seconds! The serge battle-dress, so useful an addition to coupon-restricted wardrobes, is "costed-in" at 33s. It is when we come to deal with the artillery, however, that we realise how easily the Army estimates "go up in smoke." The 25-pounder field-howitzer costs £3,000, and one shell at least £8, depending on its type. With a rate of fire of only 12 rounds a minute, a 3-minute shoot will cost £288 per gun, or over £1,700 for a battery of six.

The Navy always provides the taxpayer with a sense of having had "something for his money." There is certainly something substantial about three £7,000,000 ships steaming in line ahead. On the other hand, the losses, even on everyday duties, apart from spectacular battles, tend to be high. Thus, the recent raid on Tobruk cost us two Tribal class destroyers, *Sikh* and *Zulu*. At £467,000 each, such incidents cannot be afforded every day. Among the items which go to make up the bill for a single destroyer are £6,000 each for the latest 4·7-inch guns, exclusive of mountings; about £1,200 for each of its many torpedoes; down to £3 15s. for a humble boat's compass. The gyro instrument used by the destroyer itself, of course, costs as many hundreds. The destroyer's bunkers will hold about 500 tons of fuel oil, costing, say, £1,200, and this may be only just enough for one convoy-escorting trip from Gibraltar to Malta. The corvette, by comparison, is quite a bargain. At £150,000 apiece, they treat John Citizen's pocket quite tenderly. Submarines, on the other hand, are naturally expensive. The popular Sealion class cost nearly £250,000—four for £1,000,000!

Now that every acre of sky, nearly, has an R.A.F. occupant for most hours out of the twenty-four, a little R.A.F. arithmetic is interesting. The cheapest fighter costs about £5,000; the latest four-engined bomber, such as the Stirling or Lancaster, cannot cost less than £27,000. The capital value, as an accountant would say, involved in a 1,000-bomber raid must be at least £20,000,000, even including for a fair sprinkling of older machines. Bombs are fairly cheap, however—from about £8 a time for the small 20-pounders, £30 for the 250-pounders (of which even a Hurri-bomber carries two), up to £100 for the 1,000-pounder, and about £350 for the huge "slum-clearing" 4,000-pounders. With a bomb-load of over 7 tons, therefore, each big bomber carries over £1,500's-worth on each trip to Germany.

The arithmetic of the fighters may be less impressive individually, but remember there are many more of them. Even the older Spitfires and Hurricanes mounted eight machine-guns at about £120 each. The ammunition costs rather more than that for infantrymen, even though of the same calibre, due to the fact that incendiaries and tracers are incorporated. The cost averages about 5 rounds for 10d. The newer cannon-guns are about three times as costly for the guns, and much more for the ammunition. The 20-mm. cannon of the Spitfires and Hurricanes have each a magazine of 60 rounds, and each time a magazine is emptied—the work of far less than a minute—about £4 10s. provided by John Citizen has been spent. But if that accounts for a plane costing the equivalent of £15,000 in Reichmarks, it is certainly well spent.





THE PROBLEM OF SUB-STRATOSPHERE FLYING, SOLUTIONS TO WHICH ARE NOW BEING SOUGHT BY BOTH ALLIED AND GERMAN AIRCRAFT: There is immunit from weather troubles, and from attack by enemy fighters, but many other problems still need consideration—*Drawing by Roland Davies*

The news that the Germans have been using very high-flying bombers over Britain (in particular, a Messerschmitt 109G and a high-flying Heinkel), has once again drawn the attention of many to sub-stratosphere problems. The drawing by Mr. Davies above summarises the position; and also emphasises the points made by Mr. Tunbridge in the accompanying article. Up to a height of about 9,000 ft., pilots can work fairly comfortably and without artificial aids, but they are, of course, liable to constant attack—by enemy fighters and by anti-aircraft fire. From 9,000 to 18,000 ft. pilots can still work without oxygen, but care has to be taken when climbing or diving steeply; and the enemy fighter and flak have still to be taken into account.

Above 18,000 ft., most pilots need oxygen; and at 30,000 ft. the "ceiling" of most fighte aircraft is reached. It is from 30,000 ft. upwards that the sub-stratosphere bomber is likely t operate. Bad weather usually ends at 30,000 ft., and at 40,000 ft. it is doubtful whether anti-aircra fire would prove a very serious menace to the bombe Thus, the sub-stratosphere aircraft at this height is immun from bad weather and from enemy fighter attack, and almos immune from anti-aircraft fire. But, to bomb accurately there must come a moment when the pilot must descen to about 15,000 ft.—even on a clear day of good visibility this would be the moment when both anti-aircraft shell and fighters would attempt to play a part!

THE SKY'S THE LIMIT

The Technique of Sub-Stratosphere Bombing by Allied and German Aircraft

Described by B. TUNBRIDGE

RECENT daylight bombing successes of American Flying Fortresses have produced new interest in the question of possible "ceiling" heights at which modern warplanes can operate.

In the early days of flying, speed and (later) weight were the main considerations in up-to-date design. During the last war, planes relied for bombing on targets that the observer could pick out with the naked eye, and anti-aircraft defences had not developed sufficiently for operational height to play the important part in air-offensive tactics that it does to-day.

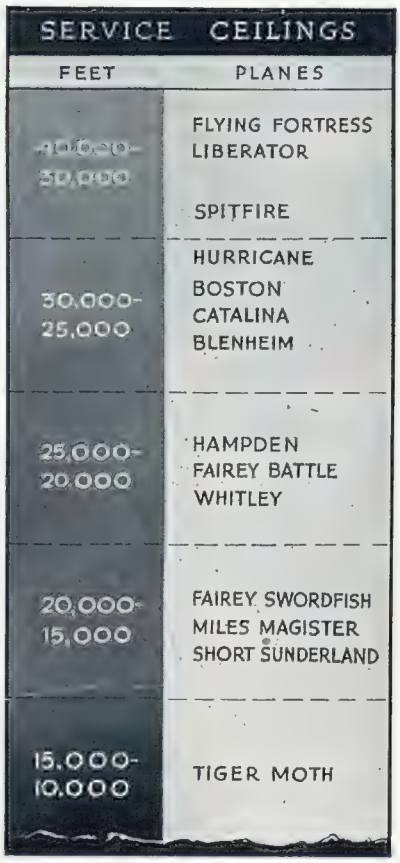
At the commencement of this war, most of Britain's bombers had a service ceiling of from 20,000 to 27,000 ft., but that did not mean bombing was carried out at these heights. Generally pilots brought their planes to well below 10,000 ft. before releasing their bombs.

With the news of Liberators and Flying Fortresses operating in the sub-stratosphere has come the threat of a new German bomber which will operate at 40,000 ft. This latest development in warplane design is the result of experiments which have been carried out over the last few years. Flight at great height has many advantages over the present operational altitudes, but amongst those benefits bombing cannot be included. To appreciate the advantages and difficulties of sub-stratosphere flying, it is necessary to understand the dividing layers that make up the atmosphere over this planet.

From the earth's surface to about 9,000 ft., there is a layer of air in which pilots can work comfortably without any artificial aid. To this maximum a pilot can climb quickly and descend with equal speed without harmful effects. From 9,000 ft. up to 18,000 ft. there is a layer which, whilst a pilot can operate without oxygen, still needs care in rapid ascent and descent. If this is too rapid, nitrogen bubbles may collect in the blood stream, and serious temporary physical effects be produced, which make the pilot lose control of his machine.

Prolonged flying at altitudes above 18,000 ft. requires the use of artificial means for adjusting the human body to rarefied atmosphere and pressure changes. At 36,000 ft. the sub-stratosphere starts, and extends up to a level of 50,000 ft. Above this the stratosphere makes for ideal flying conditions, when science has succeeded in providing the necessary adjustments for the human frame.

Until recent months, most of the war's flying has been done at 20,000 ft. or less. R.A.F. leaflet and reconnaissance flights were often carried out at over 25,000 ft., but, generally, this figure represents the top operational height employed over Europe. Even so, this figure is only obtainable in clear summer weather with ordinary planes, and in winter, icing and other troubles reduce the effective height by about one-half.



The effective "ceiling" of various types of British aircraft, from Tiger Moth (trainer) to Flying Fortress (sub-stratosphere bomber)

What advantages may belligerents hope to gain from warplanes operated in the sub-stratosphere? Three main considerations immediately come to mind. In the first place, weather conditions. Up to 30,000 ft. the pilot is constantly joined in battle with the elements. He has to contend with snow, ice, rain, cloud, poor visibility, bumpy and windy conditions. But once he flies up into the sub stratosphere, he enters a layer where weather is clear, and most of the time unvarying conditions prevail. This is a big consideration, and in post-war commercial airlines will probably result in the world's high roads being operated at anything up to ten miles above the earth's surface.

The second condition for the bomber flying at great height is immunity from ground defences. Four-inch shells would be able to reach a strato-bomber flying at 40,000 to 50,000 ft, but time is the important factor. From the fact that it takes a 3-inch shell 10 seconds to reach 16,000 ft., it can be easily understood that accuracy of fire at great heights would be very difficult.

Third factor which is important to the strato-bomber is the fact that interception by fighters would, as far as is known at present, be nil. About 30,000 ft is the maximum service ceiling of these craft, and unless new types become available, strato-bombers would be able to fly to their targets unmolested.

But it should be noted that they would only be able to fly *to* and escape *from* their targets unmolested. The strato bomber must still come within range of the fighters if it is to bomb the target accurately. On a clear June day it must come down to 15,000 ft. to have any chance of accurate bombing, and at this level it has to run the gauntlet of fighter patrols. During the other eleven months of the year it will have to come down even lower.

Apparently the success of the Fortresses, which we understand have done good work above 20,000 ft., is due to the secret bomb-sight which came into the news last year. But even at their operational height, the lesser effect of A.-A. defences seems to be due rather to the heavily armoured construction of the plane.

Design of warplanes to operate in the sub-stratosphere is not a simple adaptation of existing types. For some time the Boeing Aircraft Company of America have been carrying out experimental work in the development of such planes. They have built a number which can fly in the

rigorous conditions found at high altitudes. Research has been divided into two parts: the plane itself, design of instruments, fuselage and wings; and adjustment of breathing and pressure conditions so that the crew can live under such alien conditions. For the latter, a pressure-cabin is provided which gives an atmosphere in which human beings can still breathe normally.

In a commercial air-liner, it is only necessary to enclose the entire cabin as a pressure-chamber, but in a bomber the problem goes far deeper. There must be access to the fuselage, and some system of air-locks, so that communication can be maintained with gun-turrets. Even if designers can successfully overcome this difficulty, they are still faced with the fact that a chance shot which pierced the pressure-cabin would cause the whole plane to explode. The additional weight of the pressure-cabin would also reduce the bomb-load, and the overcoming of all these obstacles seems likely to hold back the production of strato-bombers in large numbers for some time to come.

Two German experimental models have been reported in recent weeks, the Heinkel He 177, and the Junkers Ju 86P. The former is described as a heavy stratosphere bomber, and the latter a medium bomber. The pressure-cabin fitted on the Ju 86P is said to reproduce atmospheric conditions inside the plane similar to those encountered at about 10,000 ft, when the bomber is actually flying at 40,000 ft. There is also a new version of the Messerschmitt, which is stated to be capable of attaining great heights.

It is a natural development of the war in the air that both the United Nations and the Axis should endeavour to produce planes with higher operational ceilings. But it is important to realise that service ceiling and operational ceiling are not the same; weather conditions are a deciding factor for the height from which bombs can be usefully dropped. In clear Mediterranean skies operational ceilings are higher than over Europe, and in summer the strato-bomber will not have to come down so low as in winter.

The days of strato-bombing may be ahead, but it is doubtful whether such raids can achieve accurate destruction of targets without coming down to a level where ground and fighter defences can operate against them.

TWO PICTURES OF THE NEW BOEING LONG-RANGE BOMBER on its maiden flight at Lake Washington, near Seattle

The Sea Ranger (known as the XPBB-1) is an entirely new type of naval aircraft; it has been developed by the company which builds the Flying Fortress, now in use in Allied armies all over the world. The Sea Ranger is a long-range, heavily-armed overseas patrol bomber: it is believed to carry a larger bomb-load than any naval aircraft now in battle service, and it is powered by two huge Wright Cyclone engines. Note, in these pictures, the pronounced forward pitch of the floats and the smallness of the wing span in relation to the huge fuselage: the ball gun turrets in nose and tail are also worthy of attention. In the upper view the aircraft is undergoing water tests before its flight; and below, the Sea Ranger is seen on its first flight near Seattle, on the west coast of America

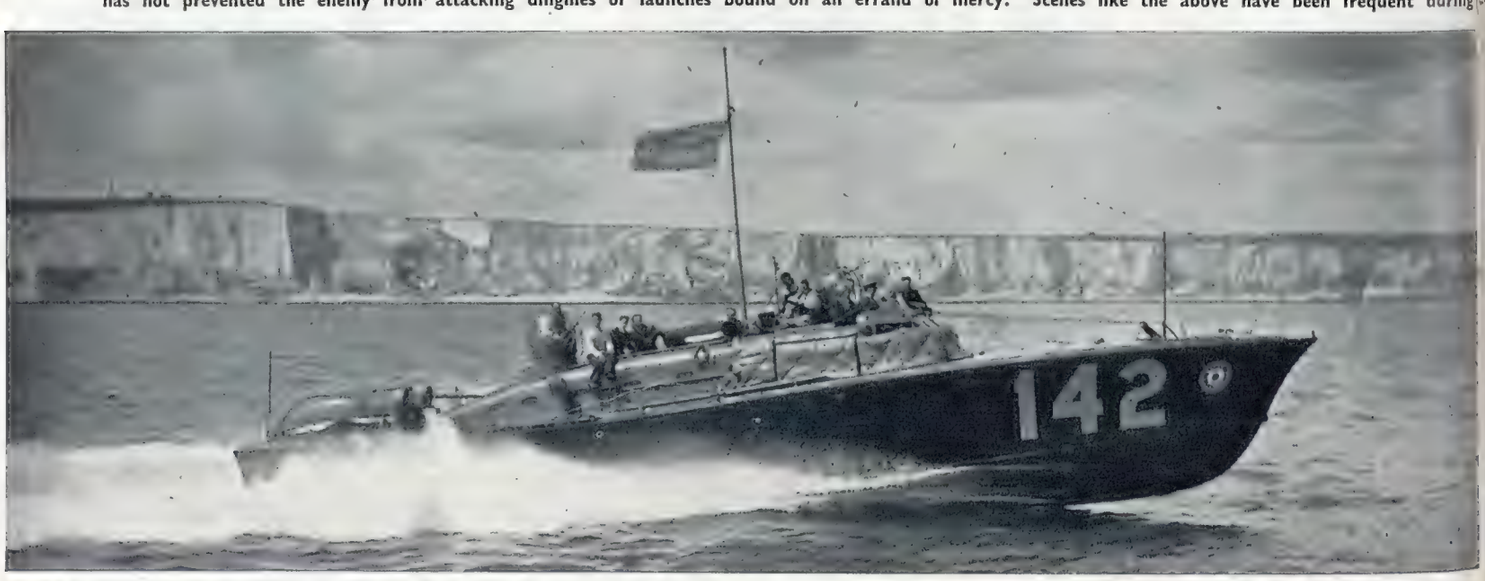
A GERMAN IDEA IN CAMOUFLAGE

Aircraft are Run Into Carefully Dug Pits and are then Camouflaged to Hide Them from the R.A.F. on Reconnaissance

—Drawing by Roland Davies

The Germans have thought out a good many ideas in camouflage during the present war, not hesitating to conceal whole tracts of territory from the prying eyes of the R.A.F. Here is a new one! An aerodrome occupied by the *Luftwaffe* has been placed close up to a wood: the aeroplanes are hidden under "trees" painted on the web of hessian covering, and the "trees" are so close to the actual wood that it is difficult to distinguish any difference from the air. Sham aeroplanes are dispersed about the ground and fake anti-aircraft guns are placed in fairly conspicuous spots. On the aerodrome itself, the Germans conceal their aircraft cleverly by running them into pits just wide enough for the fuselage and just deep enough to allow the wings to lie almost flat on the ground. Over this level surface hessian is then laid and painted for camouflage, so that it merges into the general pattern of the landscape. Distances of from 200 to 400 yards separate the pits. The amount of work involved in this great effort must be considerable indeed! Local workers are largely employed at this aerodrome but on any day that preparations for a sortie are being made they are not allowed on the ground, as the strictest secrecy is observed so that no information shall leak out

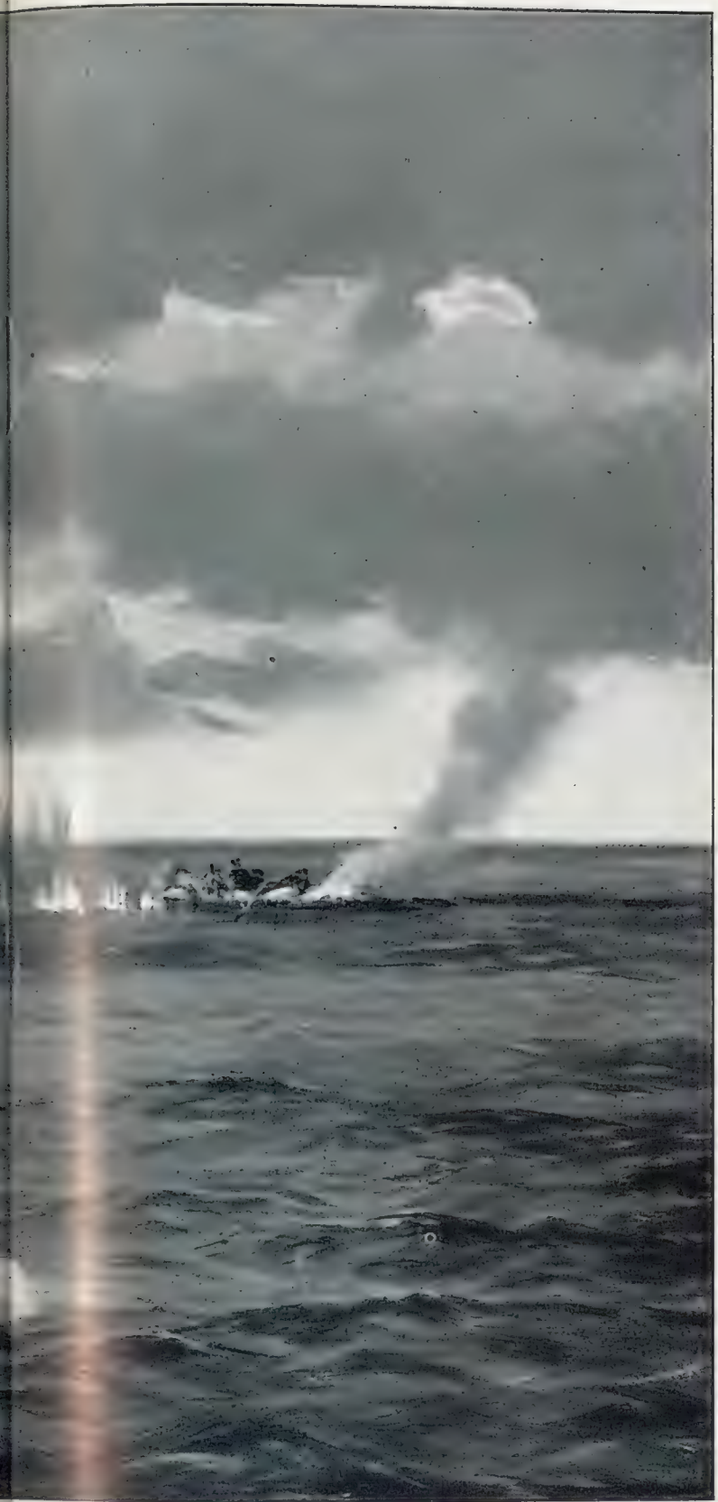
A GERMAN BOMBER ATTACKS HELPLESS BRITISH AIRMEN IN THEIR RUBBER DINGHY AT SEA: The high-speed launches of the Air-Sea Rescue Service save pilots and w has not prevented the enemy from attacking dinghies or launches bound on an errand of mercy. Scenes like the above have been frequent during ter



AN R.A.F. RESCUE LAUNCH SPEEDING OUT TO A FLOAT IN MID-CHANNEL: The latter have proved of the very greatest value in saving the lives of fighter pilot and bomber crews shot down at sea. In the background of this picture are the "White Cliffs of Dover"

THE WAY OF THE LUFTWAFFE AT SEA

Shooting at "Sitting Birds" whilst the Air-Sea Rescue launch is speeding out to save British airmen who have taken to their rubber dinghies



of British and enemy aircraft alike; but this ent months—*Drawing by Montague Dawson*

When an airman comes down in the sea there are various methods by which he can aid reconnaissance aircraft to spot him—a canister dropped overboard releases a cloud of orange smoke which will be visible over 30 miles away; fluorescein blocks will colour the sea a yellowish-green and leave a marked "wake" for some distance; yellow flags on collapsible poles will help to mark the spot; the airmen flying over water all wear skull-caps and life-jackets, yellow in colour.

But, by assisting in identification in this manner, British airmen are also exposing themselves to the danger of recognition by the enemy. During recent months there have frequently been cases where German pilots have swooped down to attack pilots and aircrew sitting helpless in their tiny dinghy: even after British rescue launches have arrived on the scene the enemy have not hesitated to attack. Hence the machine-guns which the launches carry, as a protective measure.

At the moment the Bay of Biscay is a scene of conflict, with British "mercy launches" rescuing pilots from enemy attacks. In the Mediterranean, too, the Air-Sea Rescue Service has been performing good work—with desert rescues as an added hazard

WHEN AIRMEN TAKE TO THEIR DINGHY—A two-man type, showing how it is operated in the sea: The man on the left is wearing the bellows round his neck, to pump in more air if required. The man on the right is using the canvas "glove" paddles, which allow of a small measure of directional control—they will, at any rate, allow of a certain amount of manœuvre when the Rescue Float is reached. Both men are wearing the special skull-cap, which aids identification from above

THE CREW OF A WELLINGTON BOMBER IN A DINGHY in the Bay of Biscay: Behind the dinghy trails the "wake" caused by the fluorescein blocks. The crew of seven had been adrift for six days whilst British and German planes searched for them. The British rescuers won the race by a fifteen-minute margin, and a subsequent enemy attack on the rescue launch was beaten off. A similar fluorescein trail to that seen in the photograph above is also indicated in Mr. Dawson's drawing on the left

ON THE BRIDGE OF A NAVAL RESCUE LAUNCH racing to the rescue of an airman forced down in the sea: The speed of these craft is terrific; the crew are all experts at their jobs

WHY AN AIRCRAFT CRASHES

Errors in Flight, when Heavy Weather Often Creates Special Difficulties Against which the Pilot has to be on Constant Guard

Described by PETER LISCOMB

THE Duke of Kent's tragic death when his Sunderland crashed into a Scottish hillside revives a question which must puzzle many laymen.

Why do planes crash into hills? Why, in thick weather, cannot they fly well above them? Surely modern navigational instruments and directional radio are so accurate that a pilot always knows where he is and what is ahead of him?

Yet we fairly frequently read of such accidents, even to U.S. air liners fitted with the latest devices, guided by radio beams and flying in peacetime conditions. It was in such a crash that Carole Lombard, the film star, recently lost her life.

There are four main reasons why a plane should fly into a hillside: (1) because the pilot is off course; (2) because he is not flying so high as his altimeter indicates; (3) because weather conditions or the necessity of coming down to search for landmarks compel him to fly low—this reason usually being combined with No. 1; and (4) because the huge force of wind currents can still fling a heavy plane about the sky like a piece of paper, and sudden ice can still, despite anti-icing devices, drag down an aircraft or stop its engines.

To take No. 1 first. Modern instrument and radio navigation are normally extremely accurate, so that our bombers can often fly for hundreds of miles over unbroken cloud and descend exactly above their targets. But they are not foolproof. Radio waves do not, for instance, always travel "true." They may in some circumstances be distorted and curved, as light is distorted and curved by passing through glass, water or hot air. One such effect known to radio operators is called "Night Error" because, by some obscure action of certain electrified gases in the atmosphere at night, radio waves are deflected from their true courses. Another form of distortion sometimes occurs near a coastline, and is due to the very slight difference in speed with which radio waves pass over water and over land. The result is a slight "bend" in their course.

Both forms of distortion may be slight—but sufficient to throw a pilot several miles off his course.

U.S. air-line pilots, who normally follow a radio beacon as certainly as a tram follows its lines, sometimes find the beams "wobbling," curving or disappearing altogether owing to these and other little-understood phenomena.

More formidable is the electrical storm, which can play hell with compasses and electrical instruments and render the radio completely useless, so that a pilot is reduced to flying by guesswork if he cannot take a fix on the stars or to coming down to look for landmarks.

Obviously, the plane which is forced by such circumstances to resort to the final expedient—coming down and looking for landmarks—must run the risk of a cloud-covered hillside dead ahead.

No. 2 reason must have caused many such crashes. The ordinary altimeter works on the barometric pressure principle—or "the higher, the lower." Before taking off, the altimeter is adjusted to the barometric pressure on the ground so that this pressure corresponds with zero feet on the dial.

But in the course of a long flight the general barometric pressure will vary, and the plane may run from a high-pressure into a low-pressure area. So that, while the altimeter may register, say, 2,000 ft., the real height may be only one-half or one-quarter of this. If possible, the pilot will frequently radio below for the latest local pressure, and adjust his altimeter to read true. But this may not always be possible.

Another point is this. Though the ordinary altimeter tells the pilot fairly accurately how high he is above sea-level—assuming that it is correctly adjusted—it does *not* tell him how high he is above the country over which he is passing.

Undoubtedly the barometric altimeter is an unsatisfactory instrument, and before the war a far more efficient device was being worked out. This was a radio version of the "echo-sounder" used in ships. The "echo-sounder" automatically shoots sound impulses down to the sea-bed, measures the time they take to bounce back, calculates from this the distance they have travelled, and draws a continuous contour of the sea-bed, with its depth, on a moving sheet of graph-paper.

The device designed for aircraft used short-wave radio impulses instead of sound, and by measuring the time they took to bounce from the earth below, indicated exactly the plane's height—not above sea-level but above the actual ground.

Doubtless this system—a sort of radiolocation—will be so developed in time that every big plane will carry an instrument that will not only serve as a perfect altimeter, but will also radiate short waves ahead and around to "radiolocate" hills, obstructions or even other planes flying in cloud, and warn the pilot automatically that he is flying towards something uncomfortably solid.

Now for reason No. 3. Why, in thick weather, doesn't a pilot fly above cloud? If he sees a thick, electrical storm ahead, why doesn't he always climb above it instead of diving below?

Probably, if he followed his instincts, he would climb. A pilot would always rather be high than low. But he doesn't follow his instincts when he can follow the advice of the very comprehensive R.A.F. meteorological service. With their high-flying "weather planes" and "sounding" balloons which radio down the weather conditions as they rise, the weather-men have an hour-to-hour chart of the conditions all over Britain and a large part of the Continent. Not only on the surface, but high up into the lower stratosphere.

A pilot approaching cloud may be warned by "Met." that it is electrical or ice-forming and extends upwards higher than his own ceiling. Despite his instinct, he knows that he must fly below it if he does not wish to become completely lost or sent crashing with ice weighing his wings and jamming the controls. He chooses the lesser evil and relies on his own speed, and on luck, to avoid any hills ahead.

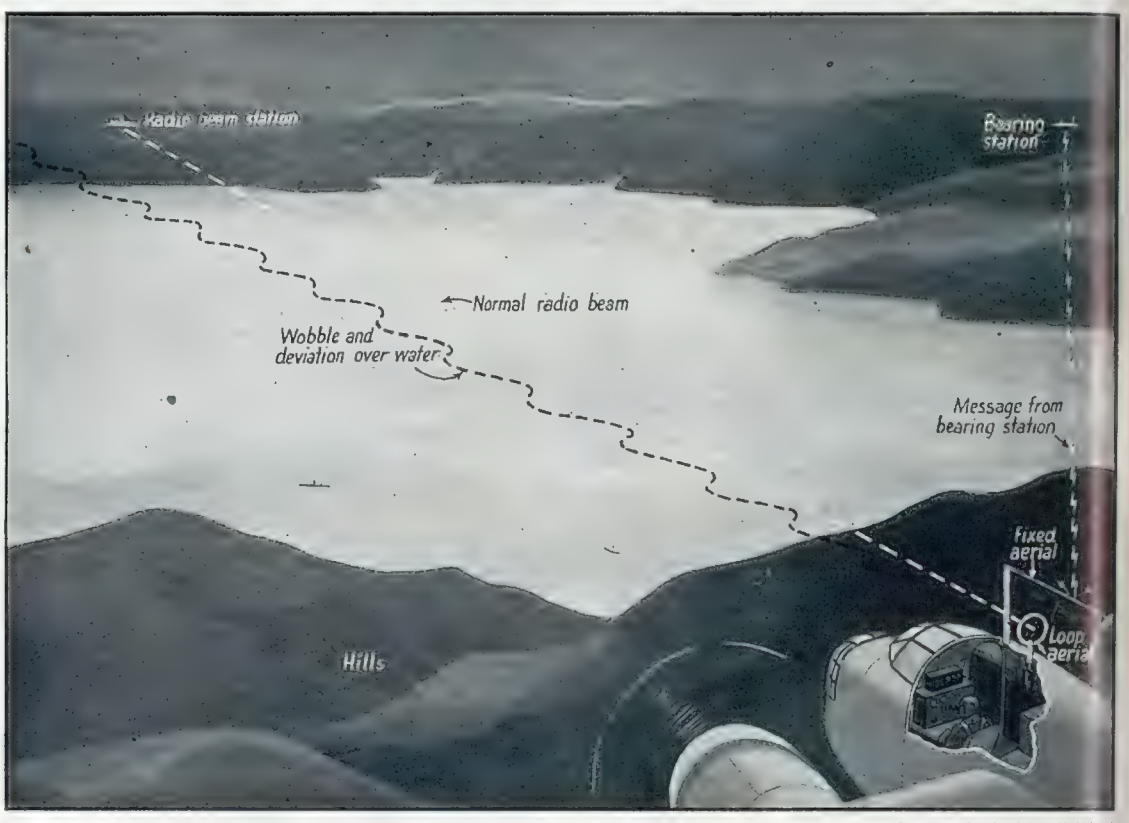
Combining with and abetting these other dangers to flyers are the great air currents—caused by up-and-down movements of hot and cold air and by the movement of wind over hills. Currents more powerful and treacherous, and giving even less warning of their presence than those of the sea.

Anyone who has flown from Croydon to Le Bourget will be familiar—only too familiar—with the sudden bumps upwards and stomach-turning drops which, apparently without reason, interrupt a smooth passage. If he was curious enough to peer downward he probably found that the air liner had just passed over a hill, perhaps even so small a hill as to be barely distinguishable from the air.

Wind striking a hill is deflected upward, so that a rising current of air is formed on the hill's windward side. This may rise thousands of feet above the hill-top and be powerful enough to throw a plane flying down-wind hundreds of feet upward in a few seconds. On the other side of the hill there will be a corresponding down-draught.

The plane flying down-wind will be safe enough, for it will be lifted high up and above the hill. But a plane approaching up-wind at only a slightly higher altitude than the hill-top may find itself caught by the down-current, so that it crashes into the hill-side. This is, of course, a particular danger when the pilot is ignorant of the hill's position through bad visibility.

Sometimes, in very mountainous country, such as the Alps or the Andes, these currents so interact with and reinforce each other that the down-draughts will suck a heavy air liner deep into the "well" between the mountains, and all the pilot's efforts may not be able to avert a crash.



Drawing by L. Ashwell Wood

III. RADIO "BEAM" ECCENTRICITIES: The beam is not always the steady directional guide it should be
Pilots working on the radio beam have difficulties at times: it may vanish altogether at a critical moment during flight, or may become distorted over water, thus causing the pilot's bearing to be incorrect

How Errors Occur, in Spite of the Pilot's Many Fine Instruments

Let us imagine a pilot starting out on a flight in bad weather over hilly country. A course, or track, has to be plotted which will take him with reasonable safety over these rises: first, due allowance must be made for the difference between true (or geographical) North and magnetic North; the difference in Great Britain is 11 deg. The force of the wind has to be estimated to allow for "drift," for when the pilot is on his way he moves through a moving sea of air. Allowance for "drift" is essential at all times.

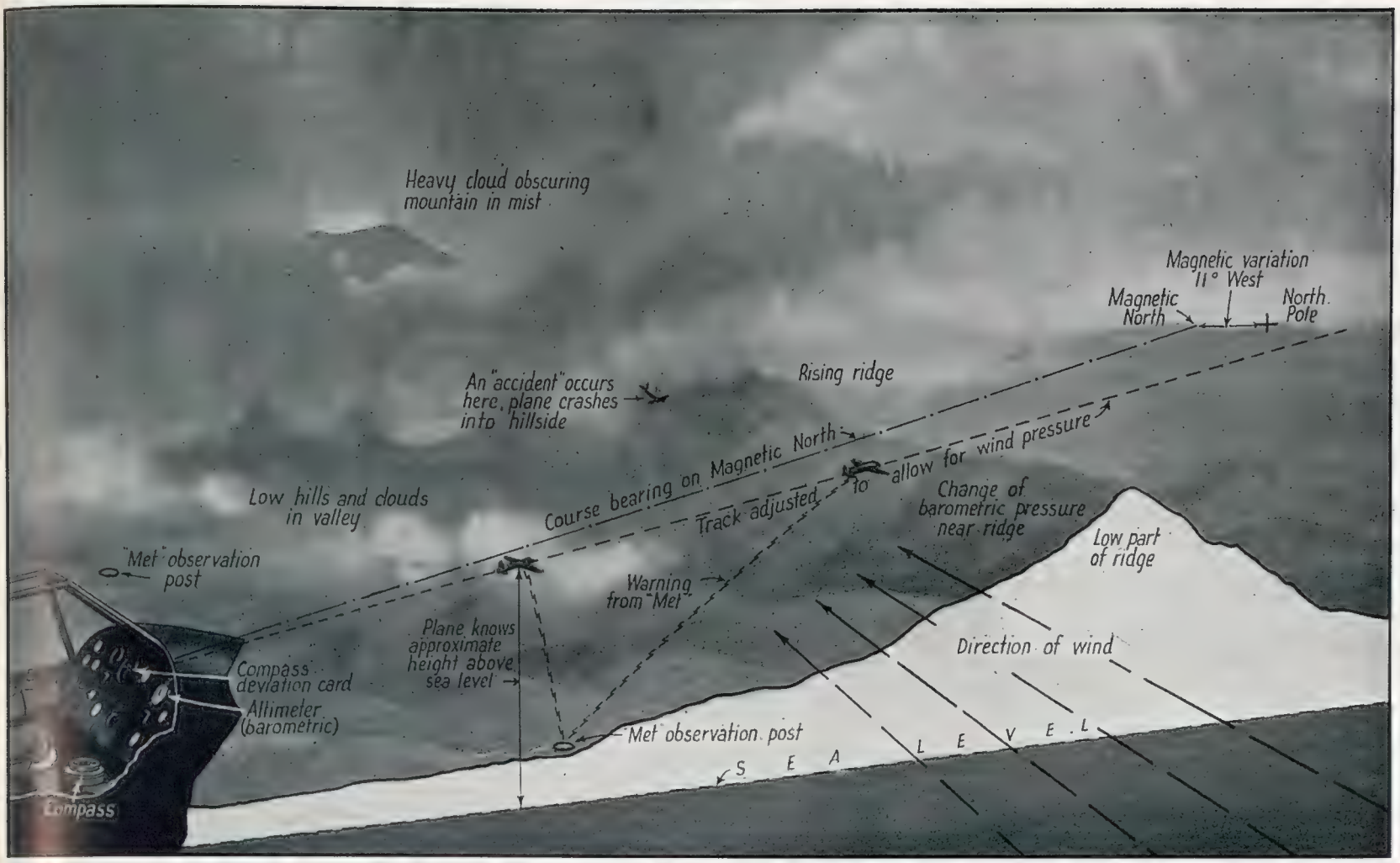
If the occasion allows, the plane may be in touch with "Met" Radio Stations on the ground. These can inform him of any change of barometric pressure, or of any other weather changes or conditions which may be ahead. To be free of danger the pilot will endeavour to fly at a safe height in order to clear any of the known obstacles which lie in his path. If he cannot see the ground he will have to trust to his barometric altimeter. This sensitive instrument, however, does not tell the pilot his height above the *ground*-level but only above *sea*-level. At all times the pilot must use stopwatch (or clock), compass and altimeter.

Should the aircraft ultimately crash through a navigational error, what are the factors which may have brought this about? In the first diagram above the pilot's track is shown as a comfortable straight line: in reality, it is merely an airy "vector"—that is, a line conceived to have a fixed direction in space, but which really has no *fixed* position.

Why has a pilot hit a giant object like a mountain-side? If there is cloud enveloping the upper parts of the range, why does he not mount and clear the obstacles with a generous margin of safety? If the pilot is free to use his wireless and keep in touch with the ground stations, they may report to him that an electrical storm is building up in front of him which reaches higher than his ceiling. He, therefore, cannot overtop the obstacle presented by the giant storm clouds. But he is not sure of his position. He must drop lower, hoping that there is nothing immediately in his path; his altimeter gives him a reading of 2,500 ft. above sea-level; but unfortunately, owing to the proximity of disturbing influences, this reading may not be correct. He may actually be flying at a height of 1,500 ft. Even then, but for another factor, he might clear the intervening ridge with a narrow margin of a few hundred feet. Unluckily, a miscalculation of the wind pressure has been made, or the wind pressure has increased during flight. The intervening hill ridge rises steadily. The plane has been borne by the air current further to the west. The weather clears, only to reveal the grass and bracken of a rain-soaked hill-side immediately below.

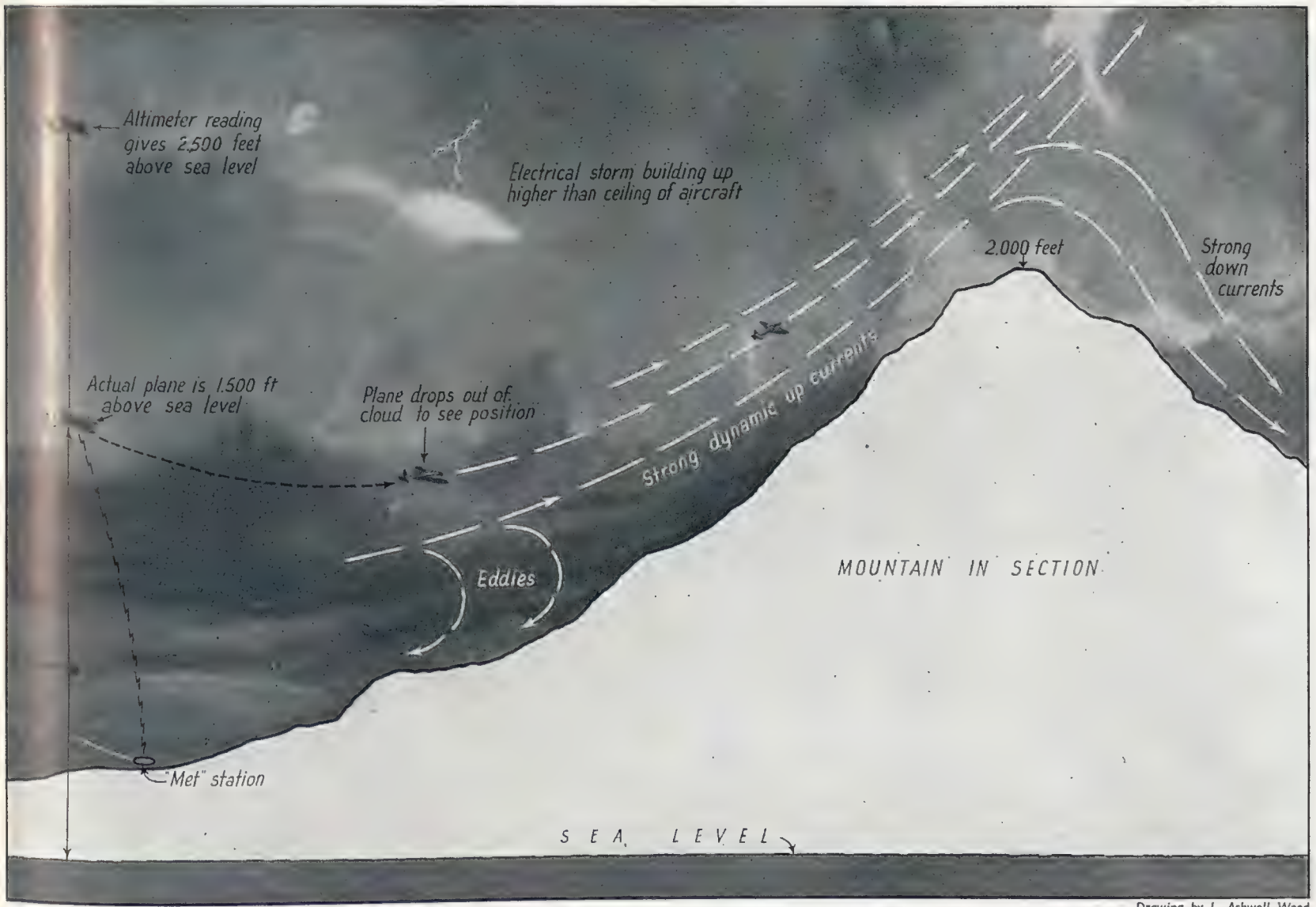
At this point it is possible that the pilot encounters an uprush of wind which may carry him over the ridge, but only to meet a dangerous down-current on the opposite slope!

Pilots working on what is known as a "radio beam" have likewise to be prepared for unusual contingencies. For a period the pilot will have an easy task—his course is set for him by the beam, and following this he will automatically arrive at his desired destination. But there are occasions when the beam will be found to act in an unaccountable fashion; at other times it will vanish altogether; and then the pilot has to use his wits and judgment to his utmost capacity. Especially if he is approaching water, he will have to make allowance for certain irregularities displayed by his instruments. If he runs into an electrical storm, these will go out of action immediately.



I. **A pilot first has to allow for deviation of the magnetic compass (11 deg. West from true North in this country); then for wind pressure or drift; and then for barometric changes which will affect his altimeter**—*Drawing by L. Ashwell Wood*

When plotting his course at the outset of his flight, the allowance for wind pressure (or "drift," as the pilot calls it) may not always be enough. In the circumstances depicted here, the wind is blowing strongly from the east: it should be borne in mind that the whole medium in which a pilot works is a mass of moving air which frequently alters its direction and its force and changes in relation to the ground surface. The question before the pilot is "What is the exact pressure of the wind?": another question is "How accurate is the altimeter?" at any given moment; a third might well be "How far am I off my exact course?", because, in jumbled hilly country, mountain peaks might suddenly appear in very awkward places! If he has made an error in calculation, an "accident" may well occur, especially in bad weather of low cloud and bad visibility. The nice straight lines shown here would suggest that this is not likely to occur, but in truth these are but airy "vectors"—lines conceived to have a fixed direction in space, but actually with no fixed position!



Drawing by L. Ashwell Wood

II. **Why the pilot comes low to get out of cloud, and the currents he may then encounter: Changes in the barometric pressure give the pilot a false impression of his height. Dynamic up-currents may carry him over a mountain, but strong down-currents may occur on the other side. If an electrical storm is higher than his "ceiling," a pilot is forced to come down to ascertain his exact position. Air disturbances over a mountain can be as much as four times its height**

THE TINIEST OF THE OCCUPIED COUNTRIES

The Reckless Courage of Luxemburg, Which Has Burst Out Into Defiance of the German Occupiers and Started the First Organised Mass Attack Against the Nazis

ON September 3 Germany annexed the Grand Duchy of Luxemburg, which then became part of the Reich, the people having the privilege of German citizenship bestowed upon them by the "gracious" gift of the Führer. The German Governor, Gauleiter Gustav Simon, at the same time announced that conscription for all men of military age would be enforced, not merely for labour but for service in the German Army. He added that this was not due to military considerations, "for despite the heavy losses on the Eastern Front, a few thousand new recruits make no difference."

The immediate response of the Luxemburgers to this act of tyranny was to proclaim a general strike, the first organised mass action against the Nazis among the conquered nations. This stoppage of all work hindered war production and roused Nazi fury at the attitude of the stubborn populace who were so absurd as not to realise their gain in being admitted to the Reich, but who, as the Gauleiter said, kept alive "the belief in a possible German defeat, despite all the victories of her armies." With their usual ferocity, the Germans sought out and shot all the leaders of the strike, including the man, Heinrich Adam, who had given the starting signal.

Yet the strike persisted, showing the determined animosity of the people against any form of collaboration. This brought the next Nazi method for dealing with recalcitrant people—that of mass deportation. Berkelmann, of Gestapo fame, has been put in charge of the eviction of the loyal Luxemburgers, men and women, and he is prepared to remove the entire population, 300,000, if Luxemburg does not accept German authority with full submission. Germans are to be brought in to replace the Luxemburg workers in the steel works, till the country is occupied by "German-minded, German-conscious people." Young men are being called up for the Army at full speed.

From the moment Germany occupied Luxemburg on May 10, 1940, it had been Hitler's purpose to incorporate the Duchy into the Reich. In his scheme of things, the Luxemburg people were Nordic "blood-brothers," talking German, and therefore naturally they would appreciate partnership with the victorious Nazi régime. It seemed a simple matter to deal quickly and effectively with so small and helpless a State. A Gauleiter was appointed, German officials took over the whole civil administration, and the former Constitution was swept away. Education was at once thoroughly Germanised under German teachers, using German school books, while religion was no longer to be taught.

To all these proceedings the people could only put up a passive resistance, though they bitterly resented the German occupation of their country. Matters, however, came to a head in October last year when a plebiscite was held asking for a general acceptance of German nationality. Hitler is always anxious to obtain a veneer of legality for his most arbitrary acts, and he was particularly desirous of gaining one State, however small, which showed a desire to become German. In spite, however, of the extensive propaganda used to induce the desired result, the citizens of the Grand Duchy voted against German nationality by 97 per cent.

THE LITTLE DUCHY OF LUXEMBURG, surrounded by Germans on all hands—Rhenish Prussia, Occupied Belgium and Occupied France—but still defiant of the conquerors: It was the victory of the Allies in 1918 which made Luxemburg an independent State. Since that time the Grand Duchess Charlotte has ruled over the tiny country. Luxemburg is 999 square miles in extent, with a population of about 300,000: almost all are Roman Catholics and, although of pure Teutonic stock, they are strongly French in their sympathies. In the south-west of the territory there is an important ironfield, whence Belgium used to receive large quantities of iron ore, whilst a good deal more was turned into pig-iron and exported to Germany. Three-fifths of the total area is cultivated. The Government, before the German invasion, was in the hands of a Council of State and a Chamber of Deputies. Luxemburg is now to be incorporated in the German Reich, it has been recently stated from Berlin. The country's origin goes back to the eleventh century, and in the fourteenth century the House of Luxemburg was one of the chief families of Europe. After owning allegiance to many different countries, Luxemburg—now a Grand Duchy—was included in the new Kingdom of the Netherlands in 1815. From that year till 1866 Luxemburg was a member of the German Confederation, but it did not join the later unions of the German States. The Allied victory in 1918 made it independent; by a referendum in September 1919 it was decided that the State should continue under the Grand Duchess Charlotte in economic alliance with France

TYPICAL OF THE "FAIRYLAND" SCENERY OF LUXEMBURG is this view of Clervaux, a peaceful little town picturesquely situated on a hill around which flows the River Clerve. In this town is the old Castle of the Seigneurs of Lannoy; and also a monument to commemorate the Rising of the Peasants in 1798 to oppose the army of the French Revolution

Great individual courage is being shown now by many of the Luxemburgers, but before the Germans entered their land they had refused to take any steps to resist the almost inevitable invasion. They clung pathetically to the delusion that as they were harming no one, no one would harm them. Yet throughout the autumn and winter of 1939, and the following spring, they had watched the Germans massing forces across the frontier.

It had caused them much concern, but they would not agree to the proposal of Prince Felix, the husband of the Grand Duchess, to increase the small armed force to 5,000 and to prepare to delay the German advance by destroying bridges and obstructing roads. Neither did they call upon the help of the French Army waiting just across the frontier, nor attempt to deal with the many Germans living in Luxemburg.

Now that the Luxemburgers realise the impossibility of living under German rule, they are ready to combine in an effort to overthrow the Nazi power. A patriotic underground league is operating, organising sabotage, spreading a sense of defeatism among the Germans, giving orders which are faithfully carried out, as is evidenced by the general strike, which was commanded by the League. Mr. Eden broadcast a message to Luxemburg, saying that England was watching with admiration and sympathy the heroic resistance. He urged them to maintain this resistance. "The growing might of the United Nations is the guarantee of your final liberation."

THE FLYING FIELD IN AN ADVANCED AREA OF THE EGYPTIAN DESERT: This is, very often, a rough-and-ready affair destined to serve one purpose alone—that of putting fighter aircraft up into the sky with a minimum of delay. There are no splendid hangars, runways, workshops, mess bungalows, and the other buildings which serve the R.A.F. elsewhere; merely a flattish piece of stony desert, with a few largish tents to serve as hangar and workshop combined. The whole "airfield" can be packed up at speed, and transported elsewhere on lorries should conditions so demand, whilst the Spitfires can be flown to the new destination—*Drawing by Roland Davies*

The TENTED FIELDS of EGYPT

—Two Special Sphere *Drawings*

NAVAL CO-OPERATION WITH THE 8TH ARMY: A detachment of Naval Signals personnel, attached to the Army, is to be found somewhere in the desert in the Alamein area. Its purpose is to maintain communications between the land forces and the ships of the Mediterranean Fleet. The tents of the detachment are camouflaged in proper desert fashion from aerial observation; all maintenance work on the radio sets is carried out by the sailors; and during quiet periods the life is not too onerous. In the far distance are the blue waters of the Mediterranean, where British warships patrol unceasingly. Co-operation between land, sea and air forces has been brought to a high pitch of perfection in Egypt—*Drawing by W. G. Whitaker*

The COMING of AUTUMN in LIBYA

Overcoats are now being brought out by the men of the Eighth Army, owing to the sharpness of the autumn morning air. Here a small Special Party, scouting through the desert south of the main positions at El Alamein, wake at sunrise, whilst the sun is still throwing long shadows and the chill night air still lingers

—Drawing by Edward Osmond

The news contained in a recent communiqué from the Middle East, which describes how during a sand-storm in the Alamein area the temperature dropped to such an extent that the troops were compelled to wear overcoats, must not be taken as indicating that the weather in this part of the world has become wintry. The normal summer condition in Libya, which starts in June after the *Khamsin* period of dust-storms, is what one might term "fixed fair" for three and a half months, and every morning the sun rises in a cloudless sky and continues to blaze all day, the heat being tempered by a strong northerly wind, which springs up regularly about 9 a.m. and continues to blow until just after sunset.

As the summer goes on, the rise of the wind in the morning becomes later until by the middle of September there are signs of an impending break. There are clouds in the sky, and sometimes the breeze fails to materialise, so that days are hot and airless, and occasionally the wind blows from the south with conditions similar to those of the *Khamsin* in the spring. During this period the weather may be far hotter than during the summer, and there may

be days and nights when there is an unusual drop in the temperature, so that an overcoat by day and an extra blanket by night are called for.

Autumn conditions with a permanent drop in the temperature will not occur until after the first heavy rain, and this may happen at any time between the middle of September and the middle of October, though occasionally, in what the Beduin call bad barley years, it may not materialise until the beginning of November. This rain, besides providing conditions suitable for campaigning, will have the effect of reconstituting the hard layer of soil on the desert's face, and laying the dust which, owing to the general disintegration of the sand caused by wheeled traffic, gets up with the lightest breeze. The rains, with their attendant local floods, may cause some damage to trench lines and may also sweep bare some stretches of mine-fields, but on the whole wet weather will not hamper operations in the Alamein area to the same extent as it did during the last two winters around Barrani, Sollum and Tobruk.

Rain is an uncertain factor in the Libyan Desert, and no man can foretell whether the coming winter will be abnormally wet or abnormally dry. In some years rain falls for three-day spells (everything goes in threes in Libya)—every fortnight, whilst in others there may be only some four rainy periods during the whole of the seven months. These storms occur mainly on the coast, and general rains over the whole desert are an unusual occurrence. As, however, the soil of the high desert from twenty-five miles inland is mainly sand with limestone outcrops, wet weather tends to improve the going.

There is just one point about weather conditions on the Alamein front, and this is with the autumn, in common with the rest of the world, there is a general rise in water-levels in all springs and wells irrespective of whether there has been heavy rain or not. This means that the *sabakha* (marsh) area of the Qattara Depression is far more of a barrier to general movement than it is during the heat of summer

—Note by Major C. S. Jarvis

R.A.M.C. stretcher-bearers working untiringly through the smoke and dust of the battlefield

A DELICATE OPERATION ON THE ACTUAL FIELD OF BATTLE : A tank crew, with one of their number who has been wounded, evacuating him to the rear in an undamaged tank during an actual desert battle

CASUALTIES on the LIBYAN FIELD

Saving the Wounded, and Honouring the Dead under Desert Conditions

By DONALD COWIE

HERE is a true story of the Libyan campaign that illustrates the difficulty of giving wounded men proper attention, and the splendid work of the Royal Army Medical Corps in spite of that. A twenty-four-year-old bombardier was filling ammunition clips under German artillery fire when he felt something hit him in the back, like a piece of heavy stone, and he lost consciousness. He recovered his senses about a quarter of an hour later, found that he had a shrapnel wound in his back some ten inches long from a mortar shell, and managed to crawl across the sand to a shallow slit trench.

There he was given first-aid by an artillery officer, who took off three of his own field dressings for the purpose. Some pals then assisted him to a field ambulance truck over two miles away, where his wound was re-dressed. The truck, with several others all filled with wounded, set off for the nearest field hospital. But on the way the convoy was located by German gunners, who shelled it unmercifully. Eventually the young bombardier tumbled out of his truck into a slit trench just before the vehicle was riddled with shrapnel.

He lay in the trench for some time, but his wound gave him such pain that he had to seek relief, and found it at last in the shape of a truck driver, who took him to a Red Cross van—one of those that our street collections help to pay for—where a doctor gave him an injection of morphia. This van linked up with an anti-aircraft battery who were using their guns against German tanks (showing that we also can make the switch-over), and soon after the entire unit was surrounded and taken prisoner, our young bombardier among them.

The Germans were in a great hurry to move the prisoners back, and showed considerable callousness towards the wounded members, simply leaving those who couldn't walk to remain, without water, food or blankets, in the desert, saying they would return the next day. But that was the saving of the men in this case. Some doctors in the party scrounged bedding and food from derelict lorries, and three days later—when the Germans had not returned after all—a number of New Zealand tanks arrived.

These conveyed the young bombardier and other wounded men rather painfully right back fifteen miles to their own field hospital. But already there were hundreds of casualties awaiting attention there—and in the midst of the muddle the Germans arrived again. They held the hospital for a few hours and then departed with most of the food and water. Next day the Italians arrived.

These were worse than the Germans, since they took all the remaining water and provisions, even depriving men at their last gasp. Moreover, they parked their artillery in the hospital courtyard, hoping to hamper British counter-fire thereby. Fortunately, the British gunners who shortly came up were splendid marksmen. They lobbed shells neatly over the hospital building to drop among the Italians. British bombers and fighter-bombers followed. After eleven days of this constant bombardment, during which the wounded men had a daily diet of only a couple of teaspoonfuls of bully-beef and two pints of tea, the Italians evacuated the place. The young bombardier, with such of his companions as had survived the ordeal, was taken away in Bren-gun carriers to the next field hospital, and then brought down to Cairo—where, incidentally, he was told that if his wound had been ⅛ in. higher it would have penetrated his spine. Next stage—hospital ship for South Africa and a cure under perfect conditions.

The story is worth telling because it is so completely typical, traversing as it does every stage of a wounded man's progress in the desert when "the balloon has gone up." The trouble is that the battle is apt to move about so swiftly, and, of course, wounded men cannot always be rushed away to avoid capture. It is probably a fact that both sides have as much to do with the enemy's wounded and dead as with their own.

Thus R.A.M.C. men in this war rarely sit behind the lines at a base tent and wait for ambulances and stretcher-bearers to bring the wounded in. Take the experience of a South African doctor. He was doing his work right in the middle of the famous "square" at Sidi Rezegh, only 100 yards from the "front line," where our men were fighting to the death. He was taken prisoner, but immediately placed in charge of a tent and an operating theatre of a German hospital along the main road to Derna. He had to attend to about thirty British wounded each day. In due course he was moved to the only real hospital in the whole of Libya, a magnificent and incongruous Italian building at El Adem, where there are hot and cold running water, tiled floors and other modern appurtenances; and he remained there till the place was evacuated by the Germans and recaptured by the British.

It should not be forgotten, however, that the desert war is a matter of quiet periods and furious spurts. During the quiet periods the R.A.M.C. does its best to stabilise field hospital conditions.

The tragedy of death in remote desert engagements, especially at a time of sandstorms and fast-moving battles, is that often a man is not missed until it is too late to find him and afford him decent burial. Normally, several branches of the service are interested in this matter, the fighting unit itself for the purposes of its records, the R.A.M.C., a special military unit that looks after records, and the padres; but it can be imagined how the machine could break down under abnormal conditions. It must be admitted, then, that frequently the drifting sands do their own funereal work; that often the heat of battle is such that the holocaust buries its own dead. "Many of our men jumped into air-raid refuge trenches," said an Italian surgeon after the original Sidi Barrani. "They did not know it, but they were jumping into their own graves." The trenches were shelled immediately afterwards.

But that is the seamier side, and so far as possible the desert dead are reverently interred in cemeteries at the chief bases. Our men, together with their German and Italian adversaries, lie side by side in many neat enclosures from El Alamein right to El Agheila, and there seems to be a compact that both sides attend to these pathetic places when they happen, by the fortune of the fluctuating war, to be in possession.

Typical of all, and most poignant perhaps, is the cemetery near the Bardia Road at Tobruk. Three or four acres of bare, barren sand are fenced in with empty oil drums. A simple stone memorial in cenotaph style, about 25 ft. high, stands at the entrance, with the inscription: "This is hallowed ground, for here lie those who died for their country. 'At the going down of the sun and in the morning we will remember them.'" It was built by Australian and British sappers during the siege. Over the graves, some of them earthern mounds and others concrete slabs faced with tiles from shattered houses, are various kinds of crosses, nearly all of them individualised in the British manner, some plain wood painted white, others of stone, here a concrete cast of the Australian Rising Sun badge, there a replica of the Polish Eagle, all with the number, name, manner of death, date and unit number of the man whose sleeping-place it marks.

It is always significant that men are never too busy or too exhausted to attend the brief, beautiful burial service of a comrade. Such services have often been conducted by unflinching padres while the shells still whistle overhead. It is also significant, however, that our men never sentimentalise openly on such occasions as do the Germans, who often turn facilely from performing the most brutal acts of war to the shedding of copious tears over the burial of a comrade. Even more extrovert are the Italians—but perhaps that is enough.

It might be asked why all our fatal casualties are not brought back to Cairo. The answer should be obvious. Communications and climatic conditions are too often unsuitable in the desert. By and large, however, relatives can rest assured that a very efficient organisation is at work, both to save and to honour their gallant men.

The casualty is an R.A.M.C. driver whose vehicle was attacked by enemy aircraft. He was got away by other ambulance drivers, who treated him on the spot

The three men in the upper picture are again seen here : the injured driver is being tended by his two R.A.M.C. comrades from the same ambulance convoy

A New Zealand medical orderly attends to minor injuries at the back of his ambulance car

Wounded prisoners, after treatment at a New Zealand Brigade advanced dressing station, rest in the shade during the British attack on the Ruweisat Ridge

"c/o G.P.O., LONDON. . ."

Sending a Letter to a Seaman in the Tropics

Just a few of the hundreds of sacks of mail being unloaded for the Navy at a tropical port. Each of these sacks contains several smaller ones, addressed to individual ships. By sealing small sacks in larger ones, the whereabouts of a ship remains a secret

WHEN you post a letter to your husband, son or sweetheart in the Navy, you need never worry about its safe arrival. Short of sinking at sea—a 1,000,000-to-1 chance—your letter will find him wherever he may be. That simple address—H.M.S. *Blank*, c/o G.P.O., London, covers the world from Esquimalt to Auckland. It will see your letter safely to Russia or the Red Sea, out to Australia, through the Panama Canal, or to some home port, wherever his ship is known to be. To reach its final destination, your letter may travel by train, lorry, ship, aeroplane and even by submarine. It may have to dodge torpedo, mine and bomb. But, like you, the Navy rates all mail as precious cargo—and finds its man whatever the cost.

To the sailor on "foreign service," mail day is the most important day since the last mail day. When you are serving overseas mail day may be once a week or twice a year—it all depends how "foreign" you are. So the smudge of smoke on the horizon that resolves itself into a ship with the mail flag flying is a heartening sight. The day takes on an atmosphere all its own. Friends are friendlier, the sky is bluer, the sea a better place, for here comes a breath of home.

Every naval base has its Fleet Mail Office and Mail Officer. It is the Mail Officer's job to get that mail whipped off the ship and have it distributed in record time. Almost before the ship is anchored, his launch is alongside like a hungry shark. Aboard, the hatches are open and the derrick rigged for a quick discharge. Ashore, Mail Office are on their toes. Extra helpers are recruited to lend a hand.

As each sack comes ashore, its number is checked and entered in a book. A gap in the consecutive numbers immediately indicates if any sacks are missing, and it isn't long before they are traced. So rarely is any mail lost that at one big naval base, whose route from England is alleged to be a happy hunting-ground for U-boats, not a single bag of mail has been lost for over a year.

In the meantime each ship has sent its own postman ashore. He is usually a responsible petty officer or leading seaman. Big ships employ a corporal of Marines as a whole-time ship's postman. In the Mail Office, the postman announces the name of his ship, signs for the still-unopened sacks, and is soon on his way back with the welcome load.

On board, the sacks are unsealed for the first time since they left home, and the letters are sorted out mess by mess. A representative from each mess takes his pile away and very soon every letter finds its owner. It 's a bleak day for anyone who draws a blank. A sailor would rather go short of food than short of mail.

The great "read" has begun. The ship is silent. In gun turrets and galleys, in engine-rooms and alleyways, in wardroom and wireless-cabin, men have surrounded themselves with a little bit of home. And if it 's only a few lines on an odd scrap of paper—well, it 's home. It 's the pub on the corner and the Odeon up the street; it 's auntie's rheumatism and the neighbour's new baby. It 's all those things you thought you wouldn't miss and find you do.

A petty officer starts to open up the outer sacks. Inside are sacks for individual ships. Soon the postmen from the various ships will be calling—everybody wants his letters quickly!

Sack on head, the native carriers arrive at the Mail Office. The Fleet Mail Officer (right) gives directions where they are to be put. Some are for the Navy, some for the Army and some for the Air Force—and even the civilians get a sack or two

The Mail Officer's boat has landed great piles of mail, and is going back for more. Marines guard it while it lies on the jetty, because this is precious cargo. At one port abroad alone, as many as 1,000 bags of mail are received and distributed in a day

This is the man responsible for many millions of letters—the Fleet Mail Officer. He checks every bag, knows if any are missing and tracks them down

The ship 's letters have come aboard. In the Master-at-Arm's office they are sorted out into the different "messes." It 's a bleak day for anyone who draws a blank

All the way from Bow, London, this letter has come for Petty Officer Coalbran, a shipwright. There 's a message in it also for his friend, the Chief Petty Officer. Regular mail plays an important part in maintaining morale

LEGAL AID FOR THE BRITISH ARMY

The War Office Comes to the Assistance of the Harassed Soldier and A.T.S. and Settles Their Legal Problems Through the Medium of a New Section

By CHARLES GRAVES

QUITE unnoticed by the vast bulk of the civilian population, the most intelligent and considerate scheme ever devised by the War Office to improve the fighting quality of our troops has been in progress for two months. This may seem a somewhat high-sounding phrase for what in fact is nothing more nor less than free legal aid to members of His Majesty's Military Forces. But the fact remains that you cannot expect men to fight well if they are worried about their private affairs, and the problem has been aggravated by so many troops having to be necessarily absent for so long a time overseas. In the last war, the majority of the troops were in France, and were able to secure leave every three months or so. Perhaps that is why the War Office did not introduce any similar scheme between 1914 and 1918.

The need for such a scheme has been promptly proved by the fact that the London District Legal Aid Section has had to deal with over 500 cases in the first four weeks of its existence. Incidentally, 75 per cent. of the cases dealt with by London District and the various Commands are concerned with matrimonial trouble. The remainder were divided among rent, hire purchase, war damage, accidents, insurance, building-society mortgages, disputes with landlords about repairs, and the like.

But perhaps I had better begin at the beginning. The scheme deals with the civil legal problems of soldiers and A.T.S., including divorce. Its function is mainly advisory, and the conduct of litigation is not undertaken. Nor does it deal with any claim by a soldier on duty against another soldier on duty, nor with any matters in any way concerning the military status of the soldier—which will continue to be dealt with through normal channels. But the scheme does apply to all soldiers and members of the A.T.S. up to and including the rank of sergeant, providing they have not sufficient private resources to employ their own legal advisers. In other words, the War Office is providing an equivalent to the Poor Persons procedure for civilians.

The scheme consists of two parts—in fact, two tiers. The bottom tier is the Legal Advice Bureau, now established in units or formations where serving barristers and solicitors volunteer to give free legal advice one evening each week. It has been found that, time and again, a brief conversation across the table with a lawyer will save the individual soldier endless worry. After his talk, he can write to the landlord or the firm that is being difficult, and can tell them where to "get off." In the case of the suspicion of his wife, he will learn what constitutes evidence and what does not. If the evidence is clear, or if some knotty point arises, the Army lawyer will get in touch with the second tier—the Legal Aid Section at Command, where whole-time, paid officers and clerks handle every problem.

In the case of matrimonial trouble, a surprisingly large number of Army husbands and wives are reconciled through the Army Welfare organisation, who employ probation officers to investigate. Many people do not realise that the Divorce Law introduced by A. P. Herbert, M.P., prevents divorce for the first three years after marriage, except in highly unusual circumstances. Some troops are also inclined to think that the mere fact that their wife has walked home from a dance with a soldier means that she has committed adultery!

Troops who are overseas seem to want more divorce than those stationed nearer home. They are given forms to fill up, and whether they are in Mauritius, Nairobi or anywhere else, the papers are put in apple-pie order in London District, the necessary affidavit is attached to the said papers, and there is no need, thanks to the assistance of the Special Services Divorce Department set up by the Law Society, and of the Poor Persons Committees and their Scottish equivalents, to wait for the soldier's appearance. I may add that 90 per cent. of these cases are undefended.

Sometimes the questions are very tricky. Supposing a Scottish private stationed in Wales marries a local girl, goes to Northern Ireland (where she joins him), and is then sent to the Isle of Man—does his wife's home in Northern Ireland get the protection of the Rent Restriction Act? Personally, I have not the slightest idea; but the private would go to the Isle of Man Legal Aid Bureau, who would send the papers to London District Legal Aid Section, where an expert on Northern Ireland law would solve the problem. When personnel to operate the Legal Advice Bureaux are not available from the unit, barristers and solicitors in neighbouring units—or the members of the Provincial Law Society—volunteer to give advice.

Altogether, there are probably 10,000 serving barristers and solicitors, but they are not, of course, spread evenly through the Service, and it is frequently necessary to secure the assistance of local lawyers. Indeed, the whole scheme is largely dependent on the goodwill of the legal profession.

So far, warrant-officers have not yet been included in the scheme. Nor has it been possible, as yet, to look after the legal troubles of prisoners of war. The reason for this is that officers and men are separated in the various camps, and there are very few solicitors and barristers serving in the ranks. But I gather that the Royal Air Force is going to join the scheme very shortly, and that the Admiralty are discussing the situation with the Lord Chancellor's Department.

In the meantime, the Law Society, the Lord Advocate's Department in Scotland and the Lord Chancellor's Department have been most helpful in every way, and the Welfare Department of the War Office is duly grateful for their assistance. If it were not for the goodwill of the legal profession, both inside and outside the Army, the whole scheme would come unstuck. The majority of the problems are, fortunately, simple, but at this early stage there are certain to be blanks in the organisation. Anti-aircraft troops stationed in out-of-the-way parts of Great Britain are unlikely to have solicitors and lawyers anywhere near them, whether civil or serving. I asked whether troops might not be inclined to secure extra leave by complaining that they are having wife trouble, and wishing to go home and be reconciled. The answer is that the probation officers are old hands at judging human nature and can quickly detect any "miking."

The various Command Legal Aid (Civil Affairs) Sections are at Cambridge, Leeds, Edinburgh, Salisbury, Chester, London and H.Q. South-Eastern Command. Cases referred by Legal Advice Bureaux to the Command Section from applicants stationed in Scotland and Northern Ireland which involve English law, are handled by the section of the Command in which the applicant's home is situated. All cases involving Scottish law are dealt with by Scottish Command Section; and cases from applicants involving the Northern Ireland and Manx law are dealt with by London District Section and Western Command Section respectively.

It would be most ungracious, at this stage, not to express deep appreciation for the work of the welfare officers and civilian lawyers who were giving free legal advice before the official scheme was launched. Durham is a first-class example. The Free Advice organisation practically covered the county; and if the others had been as helpful, three would possibly have been no need for the Army scheme in this country.

Advisers or other persons operating in Legal Advice Bureaux may not demand or receive any fee or other remuneration whatsoever for their services, but an applicant whose case is referred to the Poor Persons Committee of the Provincial Law Society, or to the Poor Persons Committee in London, will be required to pay direct to the Law Society concerned the sum of £5 as a deposit to meet the out-of-pocket expenses involved in the conduct of the suit. (This is in the case of matrimonial cases in the English High Court.)

P.S.—The establishment of United States Courts for U.S. troops in this country does not deprive British troops of their right to divorce.

WAAFS TO OPERATE ALL THE BRITISH BALLOONS: Practically all the barrage-balloon sites in Britain will soon be operated by women only. More and more Waafs are being trained to replace the men, but thousands more are still required. No more men are to be instructed in this type of work. This picture, taken at one of the late Balloon Training Centres, shows a lecture on balloon mooring with the aid of a model by an R.A.F. instructor

SELECTED MEMBERS OF THE W.A.A.F. are also being trained to take over responsible jobs as N.C.O.s on balloon sites. Amongst their training, marching drill takes a high place

The Shaftesbury Homes and "Arethusa" Training Ship

One of its Old Boys, who eleven years ago, while under its care took a leading part in the choral entertainments which were so praised, is at the present time giving a series of Broadcasts, thus delighting a much larger though invisible audience. Individual training and care is given to always bring out the best talent of those under its care. Please send a gift to help "carry on." Address: 164, Shaftesbury Avenue, W.C.2.

THE ENTHRONEMENT OF A BISHOP: And Other News Items from the Home Front

THE NEW BISHOP IS ENTHRONED AT WINCHESTER CATHEDRAL—Dr. Haigh asks admission on his arrival: Dr. Mervyn George Haigh was formerly Bishop of Coventry. A few days ago he was enthroned as the new Bishop of Winchester. No bells were rung for the occasion; and the silence of the bells has been regretted by many leading churchmen, for the bell has—since the earliest days—been regarded as a symbol of church life. On his arrival at the Cathedral, the new Bishop knocked thrice: when the great door was opened he then asked permission to enter, to take part in the ceremony of Enthronement

DR. HAIGH, WINCHESTER'S NEW BISHOP, knocks at the west door on his arrival at Winchester Cathedral

CLOGS TO BE USED BY THE A.T.S.—A girl at work attaching "uppers" to the sole: The War Office have decided to issue the A.T.S. with clogs to save rubber gum-boots. These will be used in garages for vehicle maintenance and washing duties. To meet the demand, a firm of clog-makers in South London (who have produced this form of footwear since 1912) are now speeding up the output, as clogs must take the place of rubber boots

SQUADRON-LEADER NETTLETON, V.C., VISITS A MUNITION FACTORY which has been established in a prison building: At this factory a company has turned over its entire production to the manufacture of small, but important, parts for munitions. These parts, such as cores for armour-piercing bullets, fuses for shells, etc., were very urgently needed: in consequence the firm was asked by the Ministry of Supply to manufacture them in millions. To carry on, it was necessary to secure additional accommodation; a disused county gaol has now been very cleverly adapted for the purpose! Squadron-Leader Nettleton, the Augsburg V.C., recently inspected the factory and saw some of the women workers at their machines

A NEW JOB FOR A BOMBED-OUT "NIPPY": Miss Alice Tower, now working as a billet squeezer in a war factory in the Midlands, was formerly a Lyons waitress. She was bombed out of London during the air raids, and, with a friend, took up this wartime job to "get her own back"

THE FIRST CROWN to be made in London during the war: This is for his Highness the Kabaka of Buganda, an important African potentate. It was designed and executed by Garrards, the goldsmiths and jewellers to the Crown of England

The World of Books—By Vernon Fane

BROADCASTERS, LECTURERS AND NOVELISTS

Those P. G. Wodehouse Broadcasts from Berlin; Ian Hay on the "Turmoil of Urban America"; A Nostalgic Novel of Paris; The New Joseph Shearing; Another Egotistical Mother

MR. HARRY W. FLANNERY was Mr. William Shirer's successor as representative of the Columbia Broadcasting System in Berlin. ASSIGNMENT TO BERLIN (Michael Joseph. 12s. 6d.) can, therefore, be read as a continuation of Mr. Shirer's *Berlin Diary*. The two books are thus complementary, though each has the individual stamp of the correspondent.

Mr. Flannery arrived in Berlin in November 1940, just in time to see the celebrations, or lack of celebrations, attendant upon the visit of M. Molotov. "The railroad station was decorated with flowers, evergreens and Soviet and Nazi flags . . . there was almost no one, however, except the police along the streets. There were no decorations, flags or demonstrations along the route, and no bands played."

THE ELECTION OF LONDON'S NEXT LORD MAYOR: Sir Samuel George Joseph (on right), in November next, will succeed Sir John Laurie (on left). This picture was taken at the Guildhall a few days ago, when the election of the Lord Mayor for the ensuing year was decided upon. Sir Samuel Joseph is fifty-four years of age and managing director of Messrs. Bovis, Ltd.: he served in the last war with the Royal Irish Regiment and was mentioned in despatches. He is Hon. Colonel of the 56th (1st London) Divisional Engineers, and he has twice been Mayor of St. Marylebone

Although it is clear that Mr. Flannery did not particularly enjoy being assigned to the Nazi regime, and became more and more aware of its horrors the longer he stayed, he seldom, if ever, indulges in personal comment. Rather, like a good newspaperman, he lets facts speak for themselves. For instance, he records that, when he arrived, the Nazis went out of their way to be particularly nice to him. It was only after they had got his measure, and found him impervious to the Nazi virus, that the cloven hoof began to appear. It is significant, too, that his record contains more pen-portraits of his fellow correspondents than of the German leaders.

An example of Mr. Flannery's factual and objective method is his record of the famous P. G. Wodehouse broadcast, which he gives in some detail. For him this was a decided scoop, in which Goebbels originally had no hand. It was the bright idea of an official in his Ministry. This official suggested to Mr. Flannery that P. G. Wodehouse, who was "completely without political sense," should do a series of broadcasts in the German overseas programme in return for being released from his internment camp. The idea was that Wodehouse would thus popularise the German programmes, and "even if they heard no more than Wodehouse, some of the criticism of the Nazis would be averted by Wodehouse himself."

Mr. Flannery saw in it one of the best Nazi publicity stunts of the war—"the first with a human angle."

P. G. Wodehouse's "lack of political sense" is confirmed by the record of the author's meeting with him. He considered himself an American: "He had not been in England for seventeen years." (This may astonish a number of people who have met Mr. Wodehouse in London very often during that period.) But he went on to say: "They haven't told me what I am to be paid for these broadcasts"; and then to ask: "Do you think these broadcasts will hurt the sale of my books in the United States?" The author records that he told him that they probably would, and that: "In the matter of payment I wondered at his oversight. It was out of character."

At the end of the broadcast interview, Mr. Elmer Davis, Columbia's broadcaster on the American end, commented as follows: "Mr. Wodehouse seems to be more fortunate than most of the other Englishmen in his internment camp, whose release would perhaps have had less publicity value for the Germans, and of course he was only in an internment camp to begin with, which is a very different thing from a concentration camp. People who get out of concentration camps, such as Dachau, for instance—well, in the first place, not a great many of them get out, and when they do, they are seldom able to broadcast."

The effect of this, of course, was to upset the Nazi propaganda apple-cart altogether, and they were so furious that they cut the author off the air as a punishment.

Mr. Flannery was taken on a tour of Belgium and France, including Paris, as well as to Greece and Crete, but the longer he stayed, the stronger grew his conviction that he must get away from Nazi Germany, not only because of the increasing difficulties of his own work, but because he saw his country moving inevitably into war.

Ian Hay's AMERICA COMES ACROSS (Hodder and Stoughton. 5s.) is a collection of short articles written during his fairly recent lecture tour in the United States. The articles were originally cabled back to England and appeared serially, an arrangement which gave them a certain topical value that one misses in the present volume.

The writer explains that it was written in scraps, rather as *The First Hundred Thousand* was written, and in similar conditions of stress and strain—"if you are prepared to substitute for the sound of guns the turmoil of urban America."

In the course of his tour, Major-General Ian Hay Beith visited coal-mining centres and broadcasting studios, and the House of Representatives, in describing which he becomes eligible, surely, for the Neatest Trick of the Week. "Legislators," he observes, "chatter to one another, they read letters, they rustle papers, they doze, or they stroll in and out of ever-swinging doors—more frequently out than in."

He discusses everything that came his way with the same crisp, light touch, and the same flair for a good anecdote aptly placed that we have learned to expect from him; whether it is Mayor La Guardia handing out A.R.P. notices for three hours on a street corner, and puzzling over the problem of providing his city with a siren that can compete with the existing noise, or the trials of the average rookie.

This little book could make no claims to profundity, but it has its own merit as the notebook of a lively and practised observer.

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Among the novels I have read this week is one conspicuously, even head and shoulders, above the others. It is A NARROW STREET (Cresset Press. 10s. 6d.), and although its final effect will probably be to depress you as greatly as it has depressed me, I would recommend it to anyone who has loved France, or to the even wider circle of those who wondered why people did love France.

Its author, Mr. Elliot Paul, is an American, though not precisely the kind of American in Paris that George Gershwin was thinking about. He was a newspaperman in the Paris office of a Chicago newspaper in the 1920's, and assesses his own importance to that office in the phrase, "where another drunken rewrite man, more or less, made no difference at all."

He came to live in a little street on the Left Bank in an hotel of surprising antiquity and discomfort, and proceeded, over a period of sixteen years, to make the real acquaintance of his neighbours, and to achieve friendships with some of them that only death or German ingenuity could end. This is the history of the little street, and of the hundreds and thousands of French men and women whose prototypes lived there.

Having established and defined his characters so clearly that there is no need whatever for their preliminary listing—except for the reviewer who, in his finicking way, wants to count them—Mr. Paul shows them, for chapter after chapter, in their reactions to politics, to religion, to music, to the oldest profession, to food and to a few inessentials. And when I add that there are eighty-five of these characters, all quite simply distinguishable from each other, you may understand some of my enthusiasm for this rare book. (It occurs to me that booksellers have their own interpretation of "rare books," but their meaning, in this instance, is not mine.)

I could quarrel with some of his political conclusions. There is nothing like an expatriate for holding strong views about the foreign policies of the country of his choice and that country's neighbour. But these prejudices aside, both justified and unjustified, and we are left with a book that I, for one, shall remember.

The meaning of it is summed up in one sentence, at the end of the first part, which takes the story up to 1931: "If only that tiny thoroughfare, the rue de la Huchette, a few hundred yards in length, could be resurrected, there would be enough of France alive to-day to stir a spark of hope in the hearts of men . . . if only death were not the ultimate relief and birth the worst disaster—in short, if fate, or history, or progress, or God could have spared the rue de la Huchette, from it another France might grow."

THE FETCH (Hutchinson. 9s.) is not the most *réussi* of all Mr. Joseph Shearing's masterly reconstructions of old crime stories—I think *Moss Rose* will remain as that, or possibly his biography of Charlotte Corday—but it is well worth the specialist-reader's trouble, in its own macabre way.

It is a tale of nineteenth-century England, of a young earl with what might euphemistically be called a disordered imagination, and of a village girl too steeped in novelette reading to know truth from fancy. There is much dark discussion of the occult, and a ponderous Swedenborgian or two add their baleful words to a general atmosphere that is almost solid with gloom and horror. Quite satisfactory, taken as a thriller and chiller, and enough removed from rational life not to be disquieting.

In DISTANT MUSIC (Collins. 8s. 6d.) there is one of those egotistical mothers in whom it is painfully easy to believe, whose fits of the vapours always coincide exactly with their children's amusements, and who appear to ruin their families' lives with the utmost delicacy and sensibility.

It is, as I say, a familiar type in and out of fiction, and Miss Shirley Darbyshire adds little new to it as a theme, but she writes comfortably and competently, concealing the mechanics of her plot with dialogue just dull enough to be realistic. Very readable, none the less, and an unexceptionable one for your library list.

A FAMOUS ACTOR OF THE "OLD DAYS"—Mr. Bertram Wallis in his dressing-room at the Cambridge Theatre: On the opening night of the new Chopin play, *Waltz Without End*, one of the cast, Mr. Bertram Wallis, celebrated his jubilee as an actor. Fifty years ago he made his first appearance in *Masks and Faces*, by Charles Reade and Tom Taylor—at the Pavilion, Folkestone. He then joined Ben Greet's Repertory Company, and had as companions H. B. Irving, O. B. Clarence, Oscar Asche and others who were all destined to become famous. Mr. Wallis also acted with Sir George Alexander for two years: in the same dressing-room as himself were C. Aubrey Smith, H. B. Irving, Fred Terry and H. V. Esmond. Mr. Bertram Wallis then went on to make a great name for himself in musical comedy and stage romances

"I feel like a Guinness."
"I wish you were."

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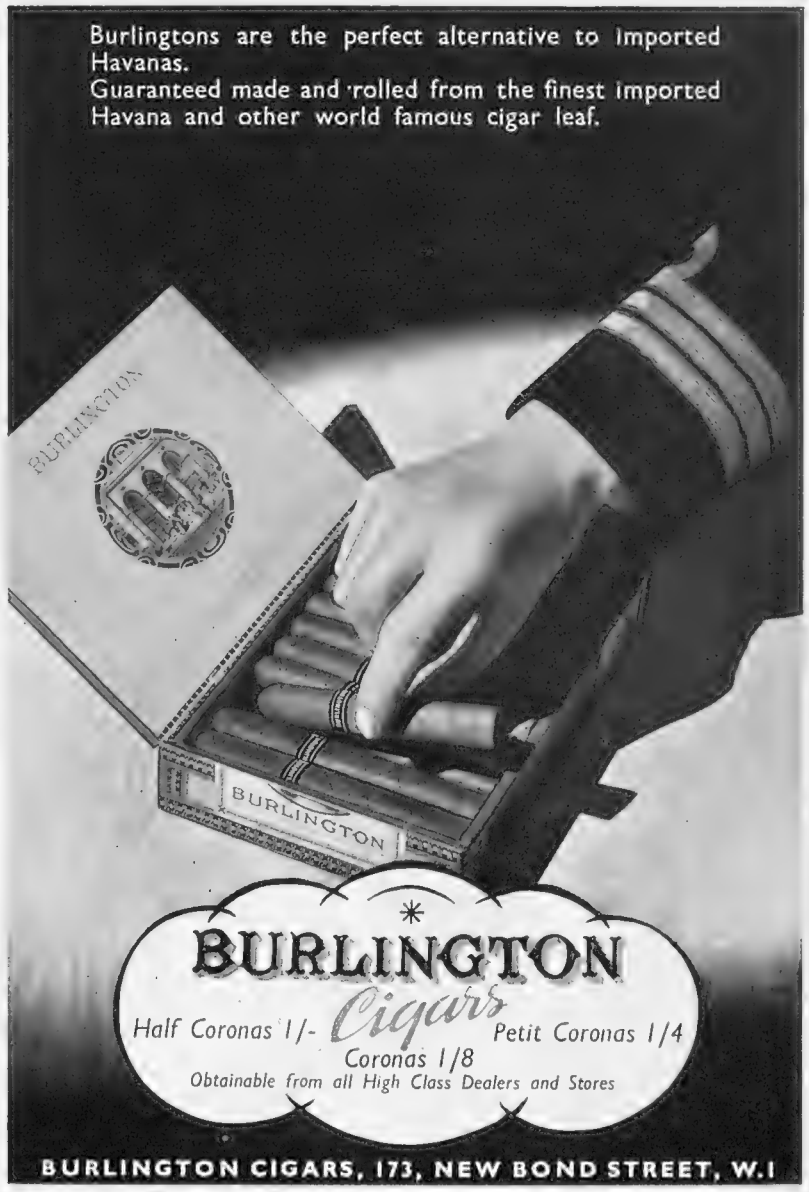

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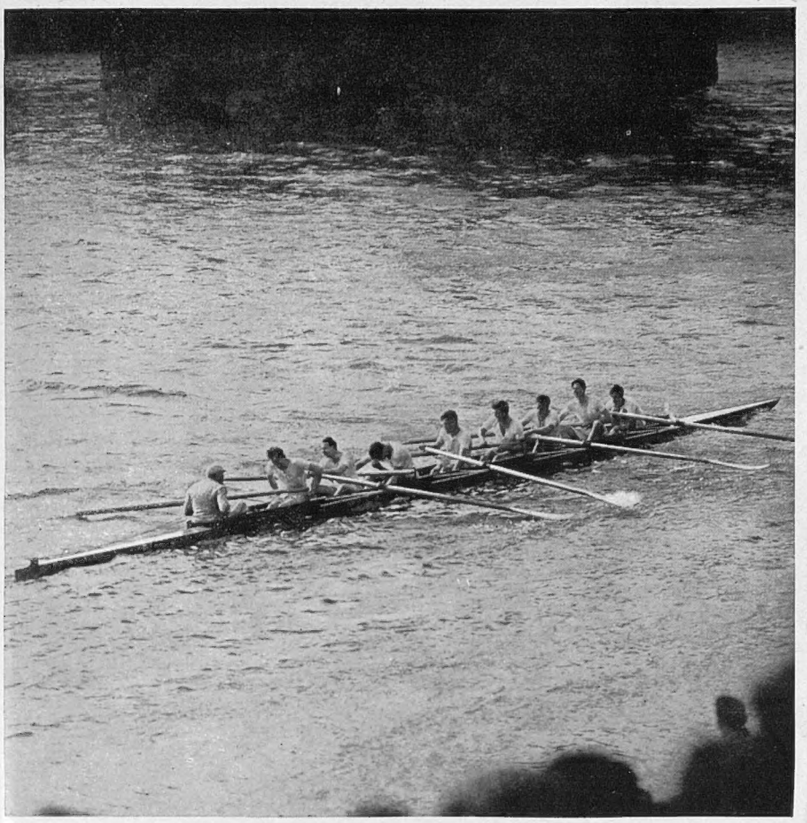

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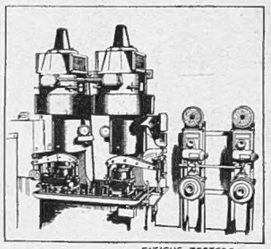

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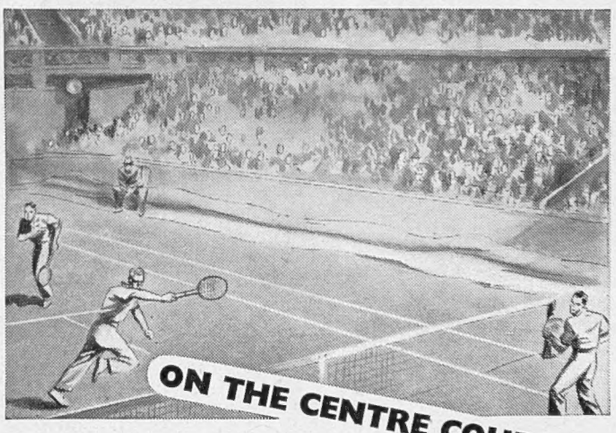

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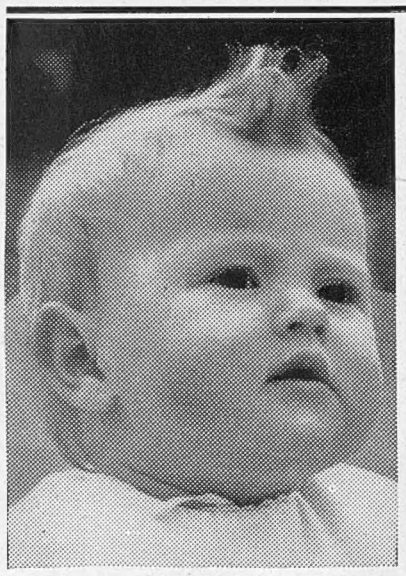

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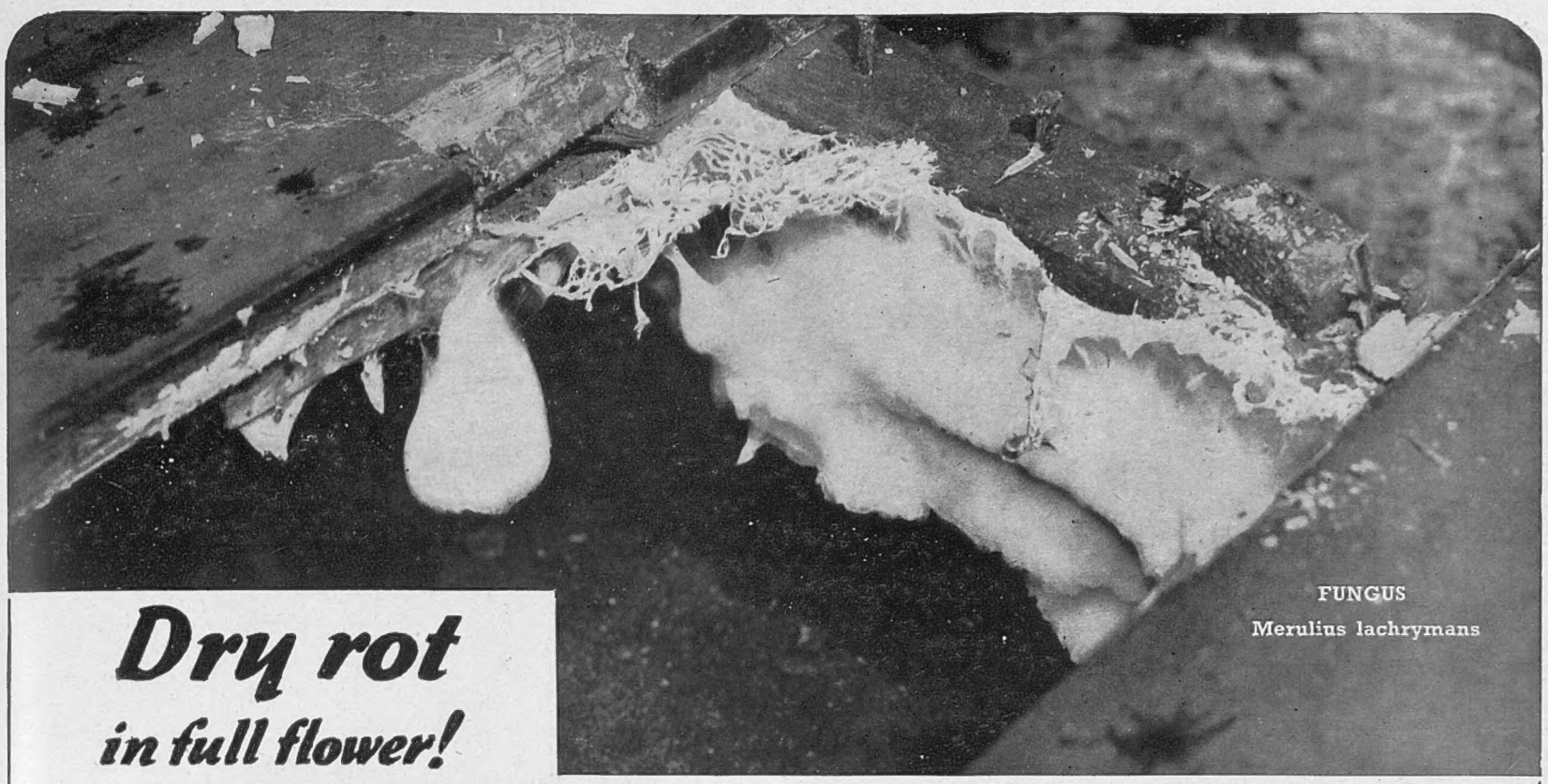

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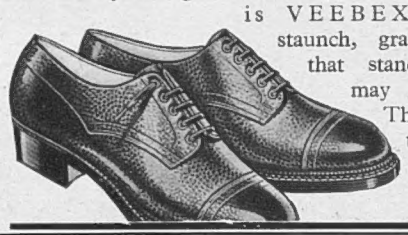

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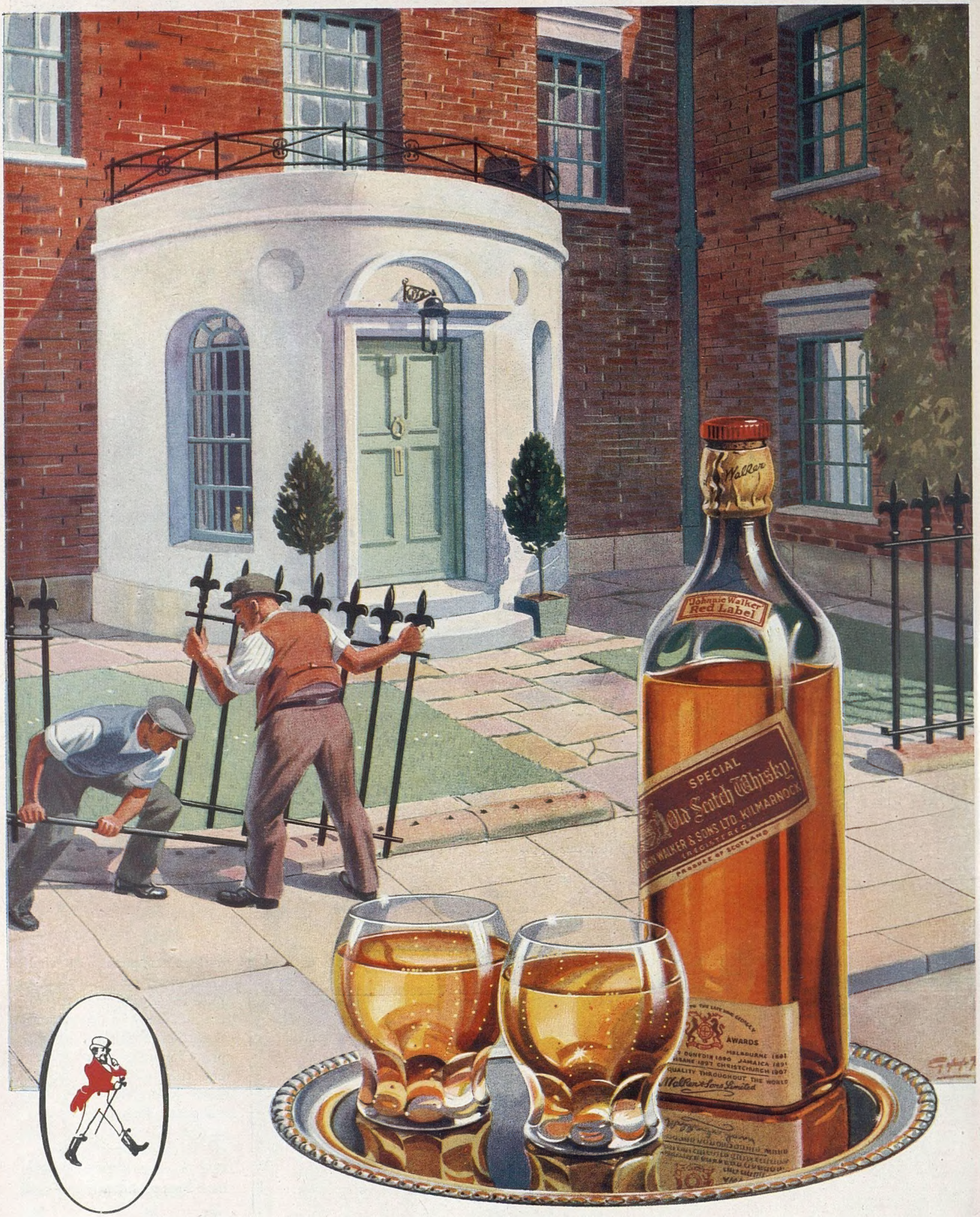

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